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RATEKINS' SEED HOUSE SEEDS FOR THE FARM, FIELD AND GARDEN

RATEKINS' NEW SENSATION SHENANDOAH

lowa.

SPELTZ.

SEED CATALOG

1904

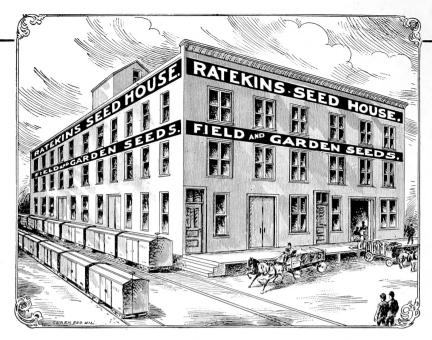
RATEKINS. SEEDS

STRICTLY

IOWA GROWN

BEST IN WORLD RATEKINS' PRIDE OF NISHNA.

RATEKINS' IOWA SILVER MINE.



Twentieth Annual Greeting.

To Our Patrons and Friends:

We are pleased for the twentieth time to send out and distribute among our friends our Annual Seed Catalog, and trust the favor bestowed on you by placing a copy in your hands will be accepted by you and received in the same spirit with which it is intended.

If by chance or some oversight you should receive more than one copy of this seed annual, we sincerely hope you will have the kindness to place it in the hands of some good friend or neighbor who may be in the habit, or who may want to send to some reliable seed house for his or their seeds the coming year.

Seed Crops of 1903.—Owing to weather conditions the past season many, in fact all seed crops, have been cut short. However, our crops here, in the richest and most fertile valley in the world, were especially favored by reason of the light, live soil, attended with more favored conditions than almost any other region or clime in this country this year. In fact, by reason of this, and for the further reason that we are better prepared, with more commodious quarters. enlarged seed house, better equipped in every way, we have been enabled to reduce prices on many of the leading staple seeds, and greatly undersell the city seed houses in large cities. In fact, by reason that we are located in the best farming and seed-producing section in the northwest, and grow all our seed Corn, seed Wheat, seed Oats, and many of our garden and vegetable seeds, and are in close touch with the best seed growers known in this country, enables us to do business direct with our patrons and furnish seeds direct from the "grower to the planter."

Quality of Our Seeds.—It is our constant aim to supply only seeds of highest quality and of superior vitality and the very best produced or on earth, and we guarantee to give you more seeds, quality considered, for your money than you can obtain elsewhere.

City Seedsmen buy their seeds in the open market like ordinary merchandise, and this is what they call seed business. To entrust your orders with such dealers is always risky when you can get your seeds direct from the grower. Our cleaning, sorting, separating and handling of all seeds is the most perfect, everything sent out being recleaned and graded to the highest point of excellence, and can be confidentially relied upon for the best possible results.

Sincerely thanking all our old customers for past patronage, and soliciting a continuance of their trade, also soliciting at least a trial order from all new friends who may receive this seed annual, and wishing each and all a prosperous new year all the year round, we are, Sincerely yours,

RATEKINS' SEED HOUSE.

Suggestions to Customers.

Please Observe the Following Rules and Directions, and Mistakes and Misunderstandings will be Avoided.

HOW TO ORDER.—Always use the order blank and envelope sent with the catalog, when possible; write plainly; keep a copy of your order; be sure and sign your name, post-office, county and state every time you write us, and above all the name of your freight station, also railroads.

ORDER EARLY.—It would be a great accommodation to us if more of our customers would order their seeds as soon as they recieve our catalog, as we could always give your orders more of our personal attention. If, however, you should postpone ordering even until the seeds are actually needed, you can rely upon getting them promptly.

SHIPPING FACILITIES.—We are located on the C. B. & Q. Ry., the Omaha & St. Louis Line of the Wabash Railway, and the Keokuk & Western Railroad, Shenandoah being the terminus of the latter, so that quick shipments can be made to any town in the United States. It is well to remember that express charges are usually very much higher on heavy goods, therefore you should order them sent by fast freight.

WE SEND SHIPPING RECEIPTS.—We also take special pains to keep shipments moving to their destination, and if not received within reasonable length of time please notify us and we will send a tracer after the delayed shipment.

TERMS.- Our terms are strictly cash with order. We do not send C. O. D. as the cost of collecting return charges are quite an unnecessary item of expense. and, prices being given, we can conceive of no necessity to warrant goods being so sent

HOW TO SEND MONEY.—Remittances may be made at our risk by any of the following methods, viz.: Postoffice money-order, bank draft, express money-order, registered letter, and in sum. of \$1.00 or less in postage stamps. The rates for postoffice money-order or express orders are very low and these are the most convenient modes for sending money, consequently the best for most of our customers.

PREPAID RAILROAD STATIONS.—Many of our farmer customers live at prepaid railroad stations where there are no agents; in such cases we ship the goods to the nearest station to the prepaid station as we never pay freight charges on heavy seeds unless charges are advanced.

OUR RELIABILITY.—As this book will probably go into the hands of many who are unacquainted with us, this question will naturally arise, and in answer to same we refer you by permission to the First National Bank of this city, to the Postmaster, Mayor, agent Adams Express Co., Pacific Express Co., Dun or Bradstreet's agencies.

SEEDS BY MAIL.—It may be all right to buy soap, sugar nails, etc., at your local store, but it is all wrong to get living. vital seeds there; they do not or cannot live under the conditions found in the average grocery store; sending seeds by mail is a very important branch of our business, and we are prepared to fill orders promptly and correctly the day they are received. Buy fresh seeds by mail; you can receive them any place in the United States in forty-eight hours or less.

If you have rural mail delivery be sure to give the name and number of your route when ordering.

Send Postage Stamps to Pay for Seeds.

Owing to the magnitude of our seed business and because we spend thousands of dollars annually for postage stamps, we are in a position to accommodate our friends and patrons who may find it inconvenient to send us money, or express orders, or drafts, in payment for seeds. We will accept postage stamps in payment for seeds to any amount from those who may find it inconvenient to send us the money in the other approved forms.

DISCOUNTS.-We offer the following inducements to those purchasing seeds in packets: Select packets to the value of \$1.25. send us \$1.00; for \$2.50 send us \$2.00; for \$3.00 send us \$2.25; for \$4.00 send us \$3.0; for \$5.00 send us \$3.75; for \$10.00 send us \$7.50; for \$20.00 send us \$15.00. The seeds will be sent by mail post paid, but these low rates apply to seeds in packets only, and at catalog prices, and not seeds by weight or measure.

We advise the formation of large clubs, and the above discounts will certainly pay anyone for some trouble in that direction.

WE PAY THE POSTAGE on all seeds by the packet, ounce, and pound, but if BEANS. PEAS OR SWEET CORN by the pint or quart are desired by mail, 10c per pint and 15c per quart additional must be sent to pay postage. All heavy seeds, such as Seed Corn or Seed Potatoes, and Implements, etc., except as noted in catalog, must be sent by freight or express at customer's expense.

ANOTHER SEED HOUSE.—Again the past summer we had to build another seed-house to care for our large and increasing trade, and now have more room and floor space than any other Seed-House in Iowa, or in the West, and are in a better position than ever before for handling orders promptly, having made many improvements

OUR SEED ANNUAL.—Please show this seed annual to your friends, and if you should receive an extra copy be kind enough to hand it to some neighbor interested in seeds who will be pleased to get it. We will be pleased to send a copy free to any one of your friends in this or any other country likely to want seeds; in return we will ask you to speak a good word for us to your friends and neighbors. An order, no matter how large or small, we take the same particular pains in filling it.

BE FREE TO WRITE us for any information pertaining to our business not found in catalog. Use a separate sheet of paper from your order, as your letter goes to the general office and your order to the mail-order department. Always be free to write. We always like to hear from our friends and customers.

RUSH ORDERS.—If time is limited and you wish to order seed of any kind over the telephone or telegraph, go to your banker or postmaster, put up the money, and have them wire or telegraph us what you want and we assure you that it will have our prompt attention and be shipped on first train possible.

GUARANTEE.—Complaints made that seeds are not good should quite as often be attributed to other causes as to the quality of seeds. There are hundreds of contingencies continually arising to prevent the best seeds always giving satisation, such as sowing too deep or too shallow; in too wet or too dry soil; insects of all descriptions destroying the plants as soon as or before they appear; wet weather. cold weather, frosts, chemical changes in the seeds induced by temperature, etc. For the above reasons it is impracticable to guarantee seeds under all circumstances.

WARRANTY.—We give no warranty, express or implied, as to description, quality, productiveness or any other matter of any seeds we send out, and we will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms they must be returned at once.

MARKET GARDENERS and others who buy beans, peas, sugar corn or seeds in bulk, make out your list and send to us and we will make you our lowest wholesale prices; club orders of same kind we make the same low prices. We guarantee that all our seeds shall reach our customers in good condition.

OUR PACKET SEEDS are full size and contain the best and freshest seeds and are not to be compared with the half-size or poorly filled packets which are so largely offered through the country and by cheap advertisements. If you want quantity and quality, and splendid vegetables, always order Ratekin's Reliable Seeds. Remember we pay the postage on all seeds at packet, ounce, and quarter-pound rates.

RATEKIN'S SEED HOUSE, Shenandoah, Iowa.

Farm Seeds.

We place Farm Seeds first, because in good and reliable seeds lies the whole foundation of the crop as well as the success and welfare of the farmer; the largest and as the success and welfare of the farmer; the largest and most important interests of an agricultural country; for on the seeds you plant depends the results and prosperity of the farmer who plants them, especially when intelligent thought and experience are combined and well directed. We come to this subject first for the further reason that we are especially strong in this line of seeds. We have had many years—almost a lifetime—of practical, NOT THEORETICAL, experience on the farm, but never an hour of observation from some comfortably arranged offers with the truitible furtished which are not the second of t THEORETICAL, experience on the farm, but never an hour of observation from some comfortably arranged office, suitably furnished with cushioned chairs and other corresponding furniture, obviously to dispense information that we did not possess to the practical farmer who does the plowing and planting. Yes, we have been up against 'the real thing itself' almost fifty years of our best lifetime—meantime with twenty years' experience in the Seed trade and we have always felt that the nearer we could keep to the practical, intelligent and experienced farmer the more valuable information we could gain; therefore we have always exercised every conceivable effort to keep in close touch with that class of farmers, and we venture the belief that we have gained more practical information through this method, and by a large correspondence with our customers, than we could possibly have gained by a thorough course in some agricultural college, for we have had thousands of letters and suggestions from our customers, each and every year, of practical value where properly applied, with reference to all kinds of seeds and their adaptability in all parts of the country and under different conditions, including soil and climate. Thus we feel that we are in position to know, absolutely, regarding suitability and adaptability of Seeds to certain localities, and can serve you better than any Seed-House to be found in the country; therefore, we give Farm Seeds a pre-eminence in our Seed Catalog over all else. We regret to say that there are many ("would-be seedsmen") Seed-Houses who have but a vague knowledge and no practical experience in Seeds and Crops, and in making up their descriptive catalogs are guided only by those who have had more experience than themselves. But feeling thus equipped as we are, we fully realize the vast importance and value to the farmer (the man on the other side of the fence), connected with this particular branch of our business; we beg to say that we devote a But feeling thus equipped as we are, we fully realize the vast importance and value to the farmer (the man on the other side of the fence), connected with this particular branch of our business; we beg to say that we devote a large share of our personal and careful attention to the selection of the very best varieties and the very best Seeds that grow, as well as to the planting, growth, cultivation, harvesting and handling all the way through until sacked or packed for sending out. By reason of the satisfactory results obtained, and pleasant intercourse with our patrons and customers, we feel proud to have the honor to say that we have hundreds of customers' names on our orderbooks who have been sending to us from ten to twenty years, each year, for their Farm Seeds; to say the least, we are pleased to know that people generally, as a rule, are not indifferent to kind, honorable and fair treatment, and we always take pleasure and pains to see to it that no customer leaves us dissatisfied. We believe it pays from a business standpoint, for on this basis we feel justified in claiming that we have built up a trade during the last twenty years second to no other Seed-House in the State of Iowa or in the West.

PRICES named in this department are subject to

the State of lowa or in the west.

PRICES named in this department are subject to important market changes. Quotations are net, and are not subject to premium or discount which is offered on other seeds. Clover and Grass Seeds are constantly varying in value. Please write for quotations, sending list of requirements, when in need. Orders sent us will be given benefit of lowest prices on day order is received. Will take pleasure in mailing samples and quoting inside prices at any time on large orders.

SHIPPING.—In this department everything that is quoted by the packet or pound is sent by mail postpaid; all large quantities, unless noted, are sent by express or freight at the expense of the purchaser. Prices named include bags, except on clover and grass seeds, and delivering to depot here.

NOTICE.—While we excerise great care to have all seeds pure and reliable, we give no warranty expressed or implied. However, if the seeds are not satisfactory on receipt and examination they are to be returned to us at once and we will refund the money.

Corn is our greatest cereal crop. The Statistician of the Department of Agriculture reports the corn crop of the United States for 1902 as being 2,500,000,000 bushels, worth over \$1,000,000.000. This is the product of 94,-000,000 acres, giving an average yield of 26½ bushels per acre.

Leading Corn States.

The states showing the greatest acreage and yield for 1902, are as follows:

		TOTAL	
	ACREAGE	YIELD	
lowa	9,302,688	297,686,016	
Illinois	9,623,680	272,436,416	
Missouri	6,775,195	264,232,605	
Nebraska	7.817.962	252,520,173	
Kansas	7,451,693	222,805,621	
	4,520,637	171,332,142	
Ohio	3,200,224	121,608,512	
(T) .1			

These are the states of the Union giving a yield of 100,000.000 bushels or more and are therefore the great corn states of the corn belt. At the Experiment Stations of each of these states special work is now being done to determine how to increase the yield per acre, so as to supply the growing demand for this most useful cereal.

Acreage of Corn Limited.

The number of acres are circumscribed but the yield can, and should be, greatly increased. The average for the nation can be doubled by improving our methods of selection, planting, and culture.

A Book on Corn-Growing.

During our many years experience in the seed trade we have had constant inquiry for a good practical book or publication on corn and corngrowing, as well as on the planting, growing and culture of other cereal, grass and farm crops. Thus fully realizing the need and value to the farmer of such a book, the senior member of our firm, Mr. J. R. Ratekin, has, after much research, prepared and compiled a book on corn-growing, and which also covers every phase of the growing and culture of all farm crops, including Wheat, Oats, Barley, Rye, Speltz, Alfalfa, Clovers, Bromus Inermis, Rape, Millets, and other grasses; in short, everything grown on the farm.

This valuable and useful book is well printed and nicely bound, and contains 100 pages 6x9, and will be mailed to any address, postpaid, in the United States, for 50 cents. (Clean stamps accepted.)

Address,

RATEKINS' SEED HOUSE, SHENANDOAH, IOWA.

Seed Corn.



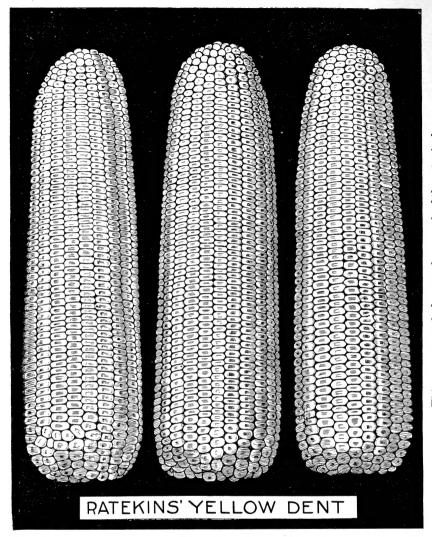
J. R. RATEKIN.

Our senior member has had fifty years' practical experience on the farm as a corn grower in one of the best corn-growing districts under the shining sun, twenty years of which time we have made the growing and breeding of seed corn a specialty. During this time we have doubtless grown, sold and sent out more seed corn than any other grower, seed-house or seed firm in the world, and more than all the catalog garden seed-houses combined. This means that J. R. Ratekin & Son (RATEKIN SEED HOUSE) may well be considered the "GREAT SUPPLY HOUSE OF THE UNITED STATES FOR CHOICE THOROUGHBRED SEED CORN." In fact, we ship seed corn each year to every state and territory in the Union. besides to every country where corn is grown. We are located on the "great" NISHNABOTONA VALLEY of Southwestern Iowa, which is the center of the best corn-growing district in the world, and which has become so famous throughout the United States for the wonderful corn it grows. The climate, soil and location here all unite and contribute to the most perfect growth and maturity of the finest quality and grade of seed corn that can be produced on earth. This, Page County, with an area of 22x24 on earth. miles square, has the unprecedented record of producing SIX AND A HALF MILLION BUSHELS OF CORN IN ONE YEAR, which equals the combined corn product of the states of Maine, New Hamshire, Rhode Island, Massachusetts, and Connecticut, and more than any one of ten other states produced the same year. Thus located as we are, at the very fountain and best natural home of corn, and with our experience on the farm and in the field as and with our experience on the farm and in the held as well as our extended experience in handling and shipping seed to all parts of the country, has brought us to fully appreciate the great importance of GOOD SEED AND GOOD VARIETIES OF CORN; we have given particular attention and our best thought to this department of our business and have made the selection and improvement of Seed Corn a specialty, always exercising great care to secure the best varieties that have proven the most suitably adapted to a wide range of conditions and especial localities for which we recommend them. Our especial localities for which we recommend them. Our recommendations are not alone based on our long experience but on the experience of thousands of our customers. made up of the most practical, progressive, and best farmers who have repeatedly tried and tested our seed corn all over the country, from Minnesota and North Dakota to the Gulf, and from Maine to California. In regard to our Seed Corn, permit us to say that all of it is grown by us here in this vicinity under special all contract and under our special supervision, we furnishing the seed stock, all of which is grown by us under the most scientific methods known for growing and improving pure bred Seed Corn. We had crops this season aggregating more than six thousand acres of corn that we have grown especially for seed purposes. Notwithstanding the unusual and unprecedented conditions that prevailed in many portions throughout the country the past season, that for the season of 1904 we have the BEST SUPPLY of SEED CORN ever before offered by any grower, seed-house or seed firm in the world. We have built and added, doubling our room, during the past summer, to our already well equipped plant, and our facilities are now better than ever before for handling, drying, storing, sorting, separating cleaning, and grading, and are not equaled or excelled by any other Seed-House in the world. Choice Seed Corn is scarce this year and prices are a trifle higher, yet the first cost of Seed Corn of choice varities is nominally nothing, as compared with the good results to be obtained, even though the seed costs five dollars per bushel. Especially is this so since one bushel of seed will plant from six to eight acres, and ought, under reasonable fair to good conditions, produce from four to seven hundred bushels of corn. An increased yield of one bushel per acre will always pay for the seed required to plant the crop, and thousands of farmers have written us every year that they have doubled their crops from our seed and have obtained from 10 to 40 bushels better yield per acre than from common ordinary varieties. Thus it always pays to plant the best, and it does not require a mathematician to figure the cost or profit.

TESTED SEED CORN.

Have you tested it? What per cent grows, etc., etc., are questions often asked. In reply to this permit us to say that we make tests repeatedly and constantly throughout the season, from the time we begin until our trade ends, never sending out anything that does not show 95 to 100 per cent good strong germination. In connection with this it may be of interest to you to know how our vast Seed Corn crop is handled. In the first place we have more floor space than any seed or drying house in the world, so far as we know. After the crop is grown we prefer it to remain in the field on the stalk as long as possible and until thoroughly dried out by nature's process which is better than any artificial method known; then when the crop is gathered it is brought direct from the field to our sorting house where it is carefully sorted, selected, and gone over by experts at the business, and nothing passed but the largest, best, and most perfectly developed ears. After passing the first man it goes to another and is again looked over; then from there to our drying house; thus all the refuse, such as is not up the standard in size, shape, color, and quality, with all shelled corn, silks, husks, and trash, consisting of two-thirds to three-fourths, is left behind and is shelled and goes onto the market at market prices, much below the original cost of the whole, while the seed goes into a thoroughly well ventilated drying house suitably arranged for kiln drying, absolutely protected from rain, snow, or any dampness. Before shelling to send out it is again carefully gone over and the butt and tip ends taken off, leaving nothing but the best and most uniform grains for seed. Our seed is not "fired dried" as claimed by some. Corn thoroughly ripened and dried out by nature's process will withstand as much cold and as low temperature as wheat, oats or yew ithout the least injury; but if corn is immature, green, soft, wet, and sobby, there is no other process cannot be depended upon to mature in time to escape either early drouth

Seed Corn handled as ours is is always cheap at any price, but this year it will cost you less than 25 cents per acre for the seed and less than a cent a bushel for the increased yield over common or doubtful sorts.



This cut was made from a photograph of three typical ears of this corn, and very clearly represents the general character and type of it.

Description.

"RATEKINS' YELLOW DENT" is of a strong, robust character; grows off vigorously from the start; stalk medium height, and is very thick, heavy, and sturdy, with broad, heavy blades which help to protect and mature the heavy crop it grows. The roots are very heavy and run down deep into the ground, thus making it one of the greatest drouth resisters in existence. It has been bred with an eye single to the elimination of all barren stalks, and each and every stalk bears one or more good large well-developed ears running from 9 to 11 inches long, with 16 to 22 rows of deep, solidly-set grains on a small red cob. The color is a golden yellow, and with the uniformity in size and color, makes it very attractive. The ears are about the same size and shape as our Iowa Silver Mine, except more solid on the cob, and matures safely and soundly in any county in Iowa, or that latitude, in 90 to 100 days, and as before stated, we regard this corn as being one of the best all-round varities for general purposes that has ever been introduced and feel sure that it will become one of the most notable leading varities in existence. PRICE, packet, 5c; pound. 30c; 3 pounds, 75c; 7 pounds (will plant an acre), \$1.25; sent postpaid to any postoffice in the United States on receipt of price. By freight or express at expense of purchaser, per peck, 90c; ½ bushel, \$1.75; bushel, \$3.00; 2 bushels or more, \$2.75 per bushel; 5 bushels or more, \$2.60 per bushel;

Like stock breeding, corn breeding and growing have brought about marvels in the possibilities of yields and development of corn during the past ten years. The ordinary farmer will, however, never turn his close careful attention to the breeding of corn any more than he does now to fancy stock breeding, but will turn to the seed specialist, same as he does to the importer and breeder of fine horses and cattle, and will secure from him new and improved strains for his practical and general use. For these reasons the past ten years have stimulated the specialist to his best and has been the means of bringing out many new and improved varieties. In our extended experience we have received samples and specimens from all parts of the country, many of them, however, of little merit or value, but some of marked characteristics, that we have found it well worth while to give them a thorough trial, and to send out samples gratuitiously to a large number of our customers to be tested over a wide latitude in order to better demonstrate their real value. In this search and experience for an ideal variety of yellow corn for general field and crop purposes we believe we now have, and are offering for the first time, a variety of corn which we have named "RATEKIN'S YELLOW DENT." We have given it our name because we have the utmost confidence that it will prove to be the BEST YELLOW DENT. TORN EVER OFFERED or introduced, and for the further reason that it comes nearest our ideal in yellow corn of anything we have ever found, and we have tried hundreds of so-called new varieties.



"RATEKINS' IOWA SILVER MINE" is absolutely | pure stock grown from our most select strains and finest type of our experimental grounds, under the most scientific methods as to purity and freedom from barrenness, and when you plant our seed you can confidently rely upon obtaining form 33 to 50 per cent better yield than from ordinary sorts cataloged under the name of this famous variety. In fact, we could name grain dealers and elevators who supply seed-houses and dealers with corn for seed from the ordinary elevator corn of the common sorts, shelled directly from the dump as brought in from the corn cribs and afterwards listed as Silver Mine.

Description.

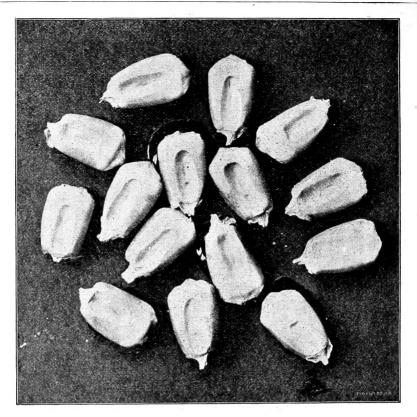
Stalk grows to a height of about seven or eight feet, and sets the ears about three and one-half to four feet from the ground, just the right height for easy picking. One peculiarity we noticed in going over the field was that there were No Barren Stalks, every one had an ear, many stalks had two good ears, and the originator says that has been characteristic every year that he has grown it. The type is very even. Ears measuring from Ten to Twelve Inches in Length and weighing one and one-half pounds are often found. The ears are very uniform in size and shape, with sixteen to twenty straight rows (usually eighteen rows). of deep, pure white kernels set on a small white cob, and the ears are well filled over the tip. It is early, maturing in less than ninety-five days, and never has been caught by the frost. The cob dries out rapidly, so that it is ready for market earlier than any other White Field Corn in existence. In its yield it will surpass all other varieties of White Corn. Seventy pounds in the ear there were No Barren Stalks, every one had an ear, many

will make sixty-two pounds shelled. It is adapted to a will make sixty-two pounds shelled. It is adapted to a wider range of soil and climate than any corn ever offered. From Minnesota to Florida, from Massachusetts to California, it will yield a paying crop where other varieties are grown at a loss. It is in every way a distinct type of corn and possesses many of the features which have made "Pride of Nishna" so popular. It is hardy and a wonderful resister of drouth. PRICE, pound, 25c; 3 pounds. 60c; 7 pounds (will plant an acre), \$1.00; sample ears. 25c, postpaid to any postoffice in the United States. By average or fraight numbers? express or freight, purchaser's expense, peck. 40c; \(\frac{1}{2}\) bushel, 75c; bushel, \$1.35; 2 bushel or more, \$1.30; 10 bushels or more, \$1.25. Sacks included on board cars here.

Lewis, Cass County, Iowa, Feb. 1, 1903.

Col. J. R. Ratekin & Son,—I am just in receipt of your 1903 catalog, and have looked over your deductions with regard to Seed Corn and Corn Growing, and think them perfect. We planted 15 acres to your "Pride of Nishna" and "Iowa Silver Mine" last season, on clover sod, fall plowed, and have just completed gathering it. It made the largest yield that I have ever obtained in all my years of experience in corn growing. On five acres which we the largest yield that I have ever obtained in all my years of experience in corn growing. On five acres which we measured and weighed the yield was ONE HUNDRED AND THREE AND ONE-HALF BUSHELS PER ACRE and the remainder of the field was equally as good. The corn measured was "Pride of Nishna," yellow, but the whole field was the finest piece of corn I ever saw. My health is comfortably good for one of my age and one who has suffered intensely for most of the time during the last two years. I am, however, still able, almost at my 84th birthday, to look after my affairs, with good help to carry out details. With kind regards, I am, Sincerly yours

OLIVER MILLS



TYPICAL GRAINS SILVER MINE, PHOTOGRAPHED.

Ratekins' Iowa Silver Mine White Corn.

The Greatest and Best Variety of White Corn in Existence.

"RATEKINS' IOWA SILVER MINE" white corn is unquestionably the most marvelous variety of corn ever grown or in existence and will happily surprise the best expectations of all who plant or grow it. This corn was first introduced in 1894, ten years ago, and in that length of time it has almost revolutionized the corn growing of this state, besides it has been grown with equally as good results in every part of the United States where corn is grown, and has likewise been crowned the queen of all varieties of white corn wherever tried or tested, it having proven to be suited to a wider range of climate, soil and other conditions than any white corn in existence. The record it has made and results obtained under all conditions of weather have never been equaled by any other tions of weather have never been equaled by any other

tions of weather have never been equated by any con-white corn.

Seed Corn growing has been our main and leading specialty for twenty years, and during all that time we have never found any variety of white corn that has given such uniform good yields and results year after year, re-gardless of place or locality, as this corn has given.

It's Prize Record.

Everywhere the "Iowa Silver Mine" captures the es over all other varieties. At one fair ten of the largest Everywhere the "Towa Silver Mine" captures the prizes over all other varieties. At one fair ten of the largest ears took first prize, ten of the smaller took second prize. Afterwards the same ten ears took sweepstakes over all other varieties, both white and yellow, making a total of \$95.00 in prizes taken at one fair by twenty ears of the "Towa Silver Mine" Corn. At Illinois State Fair it took first premium for the best bushel of corn, any color or cost, first for best white corn in the state and Grand Sweep. first premium for the best bushel of corn, any color or sort; first for best white corn in the state, and Grand Sweep-stakes for the Best Corn, of any color, competition open to the world. In 1899 the Illinois State Agricultural Society offered three large prizes for the largest corn crop grown on an acre, and the "Iowa Silver Mine" cantured all three of them with crops of 196, 176 and 154 Bushels per Acre. No other corn of any color can compare with it in worderful productive corn. per Acre. No other corn of ar it in wonderful productiveness,

It produced 215 bushels per acre in Scott County, Iowa; 211 bushels per acre in Indiana; 201 bushels per acre in Arkansas; 178 bushels per acre in Illinois; 145 bushels per acre in Nebraska; 144 bushels per acre in Ohio; 137 bushels per acre in Texas. Average of above, 176 Bushels Shelled Corn per Acre. "Iowa Silver Mine" was again victorious at the Illinois State Fair, winning FIRST PRIZE with a crop of 205 bushels per acre. At the Peoria Corn Exhibition it captured more premiums than all other varieties collectively. PRICE, postpaid or by express prepaid: per packet. 5c; pound, 25c; 3 pounds, 60c; 7 pounds, (will plant an acre), \$1.00. Specimen ears, 25c each, postpaid. By freight or express, purchaser paying charges, per peck, 40c; bushel. \$1.35; 2 bushels or more, \$1.30; 10 bushels or more, \$1.25. Sacks included. It produced 215 bushels per acre in Scott County,

Saunders County, Nebraska, Feb. 1, 1903.

J. R. RATEKIN & SON,—Gentlemen:—The Eleven Bushels of "Ratekins' Pride of Nishna" bought from you last year grew almost to a grain, and my corn was too thick but made a splendid crop. In every load could be found hundreds of ears a foot long. Inclosed find Kodak photo of a few ears which are only a fair sample of much of it. Shall want some seed this season and will send in my order later.

Very truly yours.

JEROME BARNELL.

One Hundred Bushels Per Acre.

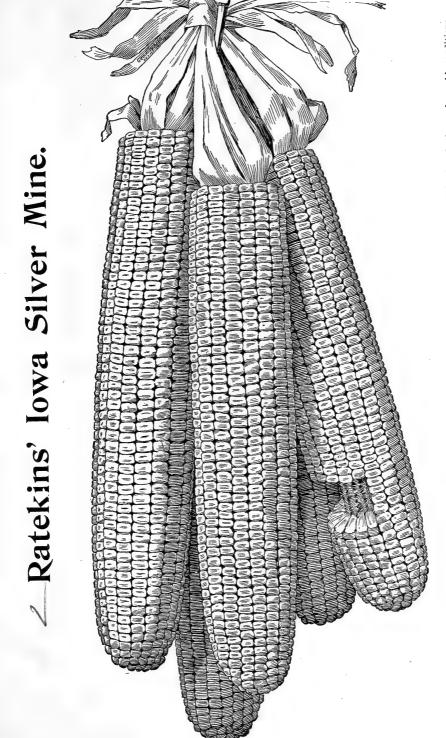
Lancaster County, Nebraska, Feb. 2, 1903. J. R. RATEKIN & SON,—You doubtless remember my order for 10 bushels of seed corn sent you last spring. my order for 10 busnets of seed corn sent you has spring.

I found the corn alright and as good as advertised, especially your "Pride of Nishna" and "Iowa Silver Mine."

Some of my crop from your "Silver Mine" went over 100 bushels per acre,

Yours truly,

C. H. Armann.



"RATEKINS' SILVER MINE" stands drouth better than any variety in existence, and will do better on poor or thin land, and other unfavorable conditions, than any variety of Corn in the world.

This cut was made from a Photograph of five ears of our Iowa Silver Mine, husked from one hill of three stalks, all measuring over 11 inches long.

"Ratekins' Pride of Nishna."

The Corn That Made Iowa Famous the World Over.



i "RATEKINS' PRIDE OF NISHNA" is not a newly discoverd variety of corn that has been recently found buried under the ruff sands of the sea for a thousand years or more, as is claimed for some of the so-called new sorts and novelties, but is was originated by us here in the Nishna Valley of Southwestern Iowa some twenty years or more ago in one of the richest and finest corn-growing districts in existence; in the biggest corn-producing county in the world; in the biggest corn-growing state in the Union; in the state that has grown a net balance of 370,000,000 BUSHELS OVER ANY OTHER STATE IN THE UNION during the period of the last past eleven years.

"Pride of Nishna" planted May 25th; find it the soundest, solidest corn I have; best and most perfect ears of all running 8 to 11 inches long, well filled out at both ends. It's just what I have been looking for for five or six years.—G. W. LOVE, Randolph County, Ills.

"Pride of Nishna" and "Silver Mine" obtained from you planted May 18th to 23d; got perfect stand; matured finely, yielding 75 bushels per acre; believe "Silver Mine" even better.—O. J. Lunn, Rock County, Wis.

"Pride of Nishna" planted May 19th; made splendid crop.—Wm. SAXE, Saunk County, Wis.

"RATEKINS' PRIDE OF NISHNA."—Continued.

"RATEKINS' PRIDE OF NISHNA" Yellow Dent Corn is one of the most wonderful varieties of corn this country has ever produced, and it has never been known to fail in making a good crop wherever corn is grown. It has been grown over as wide a range of latitude, perhaps, as any other variety in existence, always and everywhere with remarkable yields and good results.

This marvelous variety of corn combines more solid merit and vital points than any other corn in cultivation or in existence, and in all our experience with other varieties we have never found another variety of yellow corn so well adapted to all the varying conditions over a wide range of latitude as our "Pride of Nishna." Its greatest merit lies in always producing the largest yield of the soundest and best corn that can be produced anywhere in 90 to 100 days. Expert Corn Growers Pronounce it "A Perfect All-Around Field Corn for Feeding and for Market, for Size, for Yield, and for Quality of Corn."

This corn is the result of hybridization of two remarkable fine varieties of corn made twenty years ago, since which time, by careful selection and improvement, its type and characteristics have been fixed and developed to the highest degree of excellence, thus in every way making it the superior of any yellow corn grown or in

cultivation.

Description.

Stalk is strong and vigorous, with dark, heavy foliage, with a deep heavy root, and is of great vitality, withstanding drouth and other unfavorable conditions to a wonderful degree. One of the most marked characteristics of this corn, developed from careful breeding and selection, is that it is free from any barren stalks and that every stalk bears at least one good-sized well-developed ear and many of them two, thereby materially increasing the yield from 30 to 50 per cent over ordinary common varities. ears are very uniform in size and appearance, also in color, which is a beautiful golden yellow; ears measure about seven inches in circumference, and range from nine to eleven inches in length, many of them running a foot long, with from 16 to 24 rows of deep rugged grains solidly set on medium small cob. This corn is undoubtedly the earliest medium-large-eared corn in existence, and will mature safely beyond danger of frost in from 90 to 100 days from planting time. Since the origin of this corn our supreme and paramount purpose has been to produce a fixed type of large-eared early that would produce and mature the largest yield of good sound corn in the shortest length of time, and in this we feel proud to congratulate ourselves and our thousands of customers; for we have received more than ten thousand unsolicited letters from farmers who have bought and planted our seed all over the country wherever corn is grown, during the last ten years, all uniformly extolling it as the largest yielder; the earliest to mature; the uniformity of the ear; its vitality to withstand drouth and other unfavorable conditions, and in fact being the best all-around yellow dent field corn in exist-It is like a vigorous young horse, full of blood, strong and vigorous, bred for a certain purpose.

The halftone cut on the preceding page was made from a photograph and is a reproduction, exact, from a basket of select ears of this corn, none of which measured less than twelve inches long and some even more.

If you want a golden yellow corn for feeding purposes it is the corn to plant; it's the best cattle corn in the world, superior in strength and flesh producing qualities to any other sort, and we hope every farmer in the land that plants corn will try at least a part of his crop to "Pride of Nishna." We cannot too highly recommend it, and can assure all that it will not disappoint your best expectations. PRICE, packet, 5c; sample ears, 25c; pound, 25c; 3 pounds, 60c; 7 pounds (will plant one acre), \$1.00. By freight or express: peck, 40c; $\frac{1}{2}$ bushel, 75c; bushel, \$1.35; 2 bushels and over, \$1.30; 10 bushels and over, \$1.25 per bushel. Sacks included.

"Pride of Nishna" gotten from you made 74 bushels per acre, 20 bushels better than from my best sorts.— S. L. Boyd, Lucas County, Iowa. "Pride of Nishna" got from you made fine stand; yielded 20 bushels more per acre than any corn I planted.—A. Mansfield, Harrison County, Iowa.

"Pride of Nishna" obtained from you was all right and a splendid variety.—Hon. C. H. Beethe, Elk Creek, Johnson County, Neb.

"Pride of Nishna" is all right; so is the farmer who plants it. My crop from your seed averaged 74 bushels per acre.—Jerry McWilliams, Otoe County, Neb.

"Pride of Nishna" seed corn planted May 4th matured soundly and made average yield of 77 bushels per acre.—James Carpenter, Lyon County, Iowa.

"Pride of Nishna" planted May 25th; character and quality fine; matured well; yielded an average of 27 bushels more per acre than my best sorts. Was awarded first prize on it. Also "Silver Mine" got from you at Harvest Home in sharp competition.—M. F. Oldfield, DuPage County, Ills.

"Pride of Nishna" seed corn bought from you planted May 19th; matured soundly in 100 days, and made yield of 100 bushels.—E. C. Beebe, McHenry County, Wis.

"Pride of Nishna" planted May 25th; matured September 15th; best corn in this part of state.—A. D. Bulard, Rock County, Wis.

"Pride of Nishna" seed corn got from you done fine. matured well; yielded an average of 72 bushels per acre; —J. R. Shearon, Union County, So. Dakota.

"Pride of Nishna," made a yield of 64 bushels, and your "Silver Mine" 65; am well pleased; shall want two or three bushels of your other varieties.—W. A. Stark, Adair County, Lowa.

The eleven bushels 'Pride of Nishna' seed corn I got from you grew almost to a grain; made a splendid erop; hundreds of the ears were a foot long. Shall send you an order for what seed I want later.—Jerome Barnell, Saunders Co., Neb.

We shall want 800 pounds "Dwarf Essex" Rape Seed. Name us prices. Would prefer buying it from you because of the splendid luck we had from the fifty bushels "Pride of Nishna" we got from you this year.—P. Jansen & Son, Jansen, Neb.

Inclosed find order for thirty-five bushels "Pride of Nishna." You will get quite a number of orders from other farmers here.—Paul Reaume, Ellsworth Co., Kansas.

I am well acquainted with Mr. Paul Reaume; he is a large farmer and cattle man. You may send me thirty-five bushels of your "Pride of Nishna" Seed Corn.—F. G. Babcock, Manager, Ellsworth Co., Kansas.

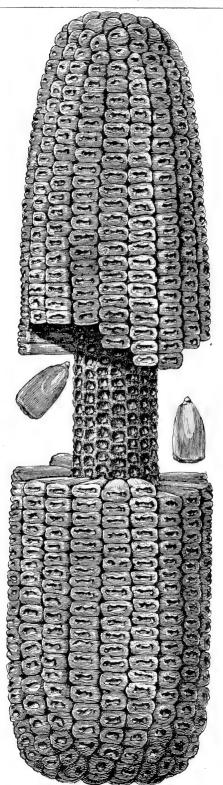
The last order I sent you received and planted July 1st. and had roasting ears from it in sixty-three days.—C. A. Hendon, Obian Co., Tenn.

The Seed Corn obtained from you was first-class and made fine stand; matured fully two weeks earlier than our native sorts.—H. J. Boldry, Simpson Co., Ky.

The Seed Corn I got from you last spring done well and made yield of a little over sixty bushels per acre.—E. L. Ento, Lincoln Co., Ark.

I am pleased to say Seed Corn received today. It's fine. Am well pleased.—C. E. Sebastian, De Sota Parish, La.

I have received catalog and have talked with my neighbor, Mr. Huggins, who bought seed "Pride of Nishna" from you last year, who recommends you very highly. Inclosed find order and money for ten bushels "Pride of Nishna."—P. M. Grubb, Ellsworth Co., Kan.



RATEKINS' PRIDE OF NISHNA.

"RATEKINS' PRIDE OF NISHNA." —Concluded.

Seed Corn received; am well pleased with way you do business. Inclosed find another order for seed.—J. H. Pickett. Ouachita Co., Ark.

The Seed Corn bought of you was planted very late and on poor ground, but produced fifteen bushels better yield than my native sorts.—J. H. Mathers. Chickasaw Co., Indian Territory.

The Seed Corn bought of you last spring was distributed among my neighbors and without exception all were well pleased. This corn was safe from drouth when native corn was tassling and silking and was completely burned up while your corn made a good yield; many of the farmers here will order all their seed from you next year.—W. G. Thornhill, Washington Co., Texas.

The Seed Corn that my neighbors and myself ordered from you last spring matured early and before the drouth and made more than double that of native sorts. We will plant nothing else in the future.—T. L. Grace, Milan Co.,

The eight bushels of Seed Corn I sent to you for was the best investment I ever made in my life for Seed Corn. It is fully four weeks earlier than native sorts, and I am now gathering fifty bushels per acre from it. It would be the salvation of this country if the farmers only knew the benefits to be derived from planting your Iowa grown seed.—D. A. Connelly, Sulphur Springs, Texas.

The "Pride of Nishna," purchased from you is a world beater. I planted three weeks later than native sorts, but it stood the drouth and made more than a third better yield than our earliest varieties.—Y. M. Mack, Independence Co., Ark

Seed Corn bought of you has proven entirely satisfactory and am under many obligations for prompt manner in which my order was taken care of. I have a fine stand of corn, and will want more seeds next spring.—D. Dool. Republic Co., Kan.

I am delighted with results from "Pride of Nishna," got fine stand and corn stands fully eleven feet high and is heavily eared while my native corn is not half as good. I will buy all my seed from you next year.—B. B. Cronin, Clay Co., Neb.

It stood the drouth well. In fact it is about all the corn I have that will make any showing this year.—Jno. A. Miller, Stoddard Co., Mo.

I planted the Seed Corn you got from May 9th, harrowed once and cultivated four times and obtained an average yield of seventy bushels per acre.—Wm. F. Clark. Whiteside Co., Ills.

REMEMBER

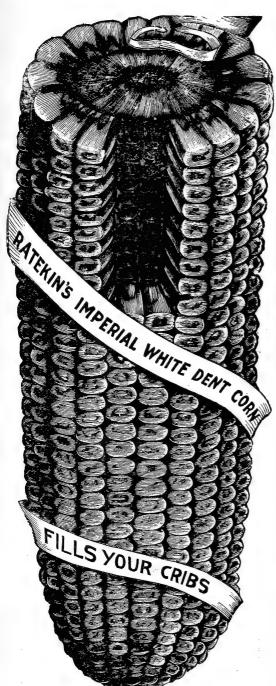
in getting our prices do not compare them with seeds of your neighbors or seeds left by some farmer at a dealers to sell or exchange for goods—seeds which have not been recleaned. There is a vast difference between recleaned seed and seed that comes from the threshing machine.

There is no earthly reason why the farmers of the West should send East for their seeds, as Iowa seeds are not to be excelled the world over. The soil, climate and conditions make it a perfect place to raise the best samples for the field and garden.

We guarantee satisfaction to every reasonable demand, and we positively assert that all our seeds are of as good quality as can be found in the United States, both in germinating power, high standard, and quality. We are cranks on the question of good seeds, and make it our first and last consideration in making up stocks.

"Ratekins' Imperial White Corn."

A Great Favorite Wherever Tried and Tested.



This excellent and superior variety of corn has been grown here in the Nishna Valley of Southwestern Iowa for the past ten or twelve years with good results and uniform large yields. It was first introduced here from Illinois by an old German farmer, and on account of its many valuable and meritorious qualities, including its uniform big yields and its vitality to resist drouth and other unfavorable conditions, it soon became a favorite with many of our largest farmers and best corn-growers. By reason of this and after seeing it growing we have for the past five years been experimenting with it by sending out small quantities all over the country, gratuitous, to our customers who ordered seeds from us. This in order to thoroughly test the adaptability over a wide range of territory under all varying conditions including climate, soil, and other things incident to our wide trade. There are many varieties of corn well suited to one locality that may be of little or no value in another place, but on the face of our observation we were so favorably impressed with this corn that we felt impelled to make a thorough trial and test of it in this way, and our judgment of it has now been proven correct, and in 1902, for the first time, we catalogued it along with our other improved varieties, and especially all over the southern states, and we are pleased to say and to know that all reports from those who planted and grew crops from it are remarkably well pleased and shows a marvelous record as one of the hardiest varieties, surest croppers and best yielders that we have ever sent out.

Description.

It is a pure white corn with red cob; a sign in itself of great vitality; ears measure from seven to eight inches in circumference and nine to twelve inches in length; sixteen to twenty-four rows solidly set on a medium small cob. not unusually hard but solid and compact, and will weigh out from three to four bushels more shelled corn to the wagon load than ordinary varieties. Stalks strong and rugged and grow from seven to ten feet and sets ears about three and a half feet from the ground, and matures safely and soundly in ninety to one hundred days good corn weather from the time of planting.

It is a corn every farmer can plant with assurance always of a good crop of the best grade and quality of corn that is grown. It is especially well adapted to thin and old ground but will respond to good land and good cultivation second to no other variety in existence. Owing to the increasing demand for white corn, not alone in the United States but throughout all the world where corn is rapidly being introduced for its multiplicity of uses for food, white corn is destined to command, as it now does, a premium of two to five cents per bushel over yellow corn. Cereal mills the world over want white corn; to have it and to get it farmers must plant and grow it. Only a few years ago we were selling six bushels of yellow seed corn where we were selling but one of white. Now we are selling more white corn than we are yellow. Why is it? Because farmers have learned during the past few years that white corn not only commands a better price than yellow corn but withstands drouth and other unfavorable conditions much better than yellow varieties. We cannot too strongly urge all of our customers who order seed corn from us this season to include in their order a few bushels of our 'Imperial White.' It is a sure cropper, big yielder, early to mature and an all-around field corn that you can always depend upon.

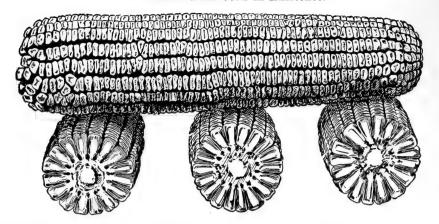
PRICE: Packet, 5c; pound. 25c; 3 pounds, 60c; 7 pounds (will plant one acre), \$1.00. Sample ears, 25c, prepaid to any postoffice in the United States. By express or freight, purchaser's expense. Peck, 40c; 1-2 bushel, 75c; 1 bushel, \$1.35; 2 bushels or more, \$1.30; 10 bushels or more, \$1.25. Sacks included.

High-Grade Seeds.

It costs more to grow a crop for seed purposes than the ordinary farmer can understand. It requires extra choice stock seed, special preparation of the land, special cultivation, great care in harvesting, drying, cleaning, testing, preparing for shipment, bags, etc., so that we are obliged to ask a slight advance over market prices, but any intelligent farmer will agree with us such pedigreed seed is well worth the price we ask for it. It pays to sow the best.

"Ratekins' Queen of Nishna."

The Earliest Dent Corn in Existence.



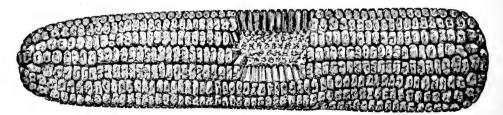
RATEKINS' QUEEN OF NISHNA is without doubt the earliest Dent corn there is in existence or that is grown, and is especially well adapted to northern climates where the seasons are short and where frost is expected early; also to the South where corn is often planted late in the season, after the small grain crop is harvested and taken off the ground It supplies the place and is far superior to the Mexican June. corn in the south, and the extra earlies in Minnesota, North and South Dakota, Wisconsin, Michigan, and New England, always maturing in seventy to eighty days, and even where any of the flint corns will mature.

"Ratekins' Queen of Nishna" resembles very much the "Pride of the North." By careful selection and improvement by planting only from the best strains, and from stock grown especially for seed purposes with the utmost care, we claim our stock to be of superior quality in earliness as well as in yield and quality of product. In fact, we have used every known method in breeding this corn up to obtain all the essential points of highest standard known in the perfection of an extra early variety of field corn for the extreme north, as well as to supply an extra early corn for the central, western and southern states for late planting.

Description.

The ears run from seven to ten inches long, with sixteen to twenty rows (usually about eighteen rows) of very deep compact grains, solidly set on a very small red cob, and yields from forty to sixty bushels per acre; our seed crop this season was unusually fine, and yielded strong Fifty-five Bushels Per Acre. We have sold hundreds of bushels of this corn all over North and South Dakota and Minnesota, and it has given remarkably good satisfaction and yield. In 1901 we sold one large farm company in North Dakota sixty bushels of this seed for their own planting purposes, and another land company fifty bushels, besides hundreds of smaller orders, and without exception they obtained the best of results, and many of them have since given us large orders, many of them from 100 to 500 bushels, on the strength of results from this seed corn. It's the corn for the North and for the South, and the corn to plant everywhere where early varieties are wanted for any purpose. We cannot too strongly commend it to our customers and to the farmers everywhere where you want an extra early variety. It's the corn to plant. PRICE: Packet, 5c; peck, 50c; pound, 25c; 3 pounds, 60c; 7 pounds, \$1.00, postpaid. By freight, per bushel, \$1.50; 2 bushel, \$2.90; 10 bushels and more, \$14.00. Bags free on board cars here.

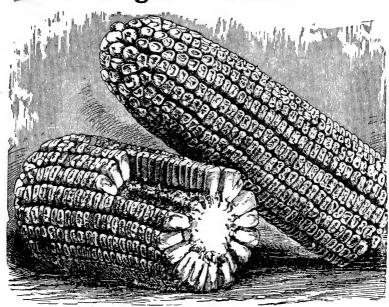
Ratekins' Extra Early White Corn.



This corn is exactly the same type of corn as our "Queen of Nishna," and is equally as early, maturing in from seventy to eighty days from planting time. It is in great request and demand everywhere for grinding and mill purposes early in the season and before other field varieties are dry enough to grind into cornmeal. It will bear planting somewhat closer and thicker than later and larger varieties, thus it often yields as much as the larger sorts, besides every pound of it is as solid as lead, our crop this season yielding full fifty-five bushels per acre. PRICE: Packet, 5c; pound, 25c; 3 pounds, 60c; 7 pounds, \$1.00, postpaid; per bushel, \$1.50; 2 bushels, \$2.90; 10 bushels and over, \$1.40 per bushel.

No doubt many novices, amateurs, and others without practical konwledge, experience or capability, will copy after our 'book,' in fact, we have personal knowledge of those now waiting to obtain a copy of our book as soon as out of print before printing their own effusions, in order to get copy to go by, and thus palm off their catalogs as their own productions. Kind reader, should you see some of them, you can draw your own conclusions.

"Legal Tender."



LEGAL TENDER.

This is now one of the most prominent late varieties of yellow Dent corn in the country. It is the result of about twenty years' selection by a seed corn specialist in Iowa, and has taken first premium at many state and county fairs. The corn is productive, and of uniform pure yellow color, The corn is productive, and of uniform pure yellow color, ear very large and long and a deep grain on a small cob, while the stalk does not grow too large. The intruducer says: 'Our ideal ear is an ear two-thirds as large around as it is long, containing sixteen to twenty rows, and small shank. The kernels are deep, the cob is small at the butt and the ear holds its bigness toward the point until near tapering off. It should be capped over and the kernels should hold their bigness toward the point and the butt run out straight and not crinkle.

The above engraving, from photogroph, is not exaggerated, but is a true picture of the corn. It should not be planted north of the latitude of a line running east and west planted north of the latitude of a line running east and west through the center of the state of Iowa, but it will do well anywhere south of that line. PRICE: Packet, postpaid, 5c; pound. 25c; 3 pounds, 60c; 7 pounds (will plant an acre), \$1.00. By freight at expense of purchaser, peck, 40c; 1-2 bushel, 75c; 1 bushel, \$1.35; 2 bushels, \$1.30 per bushel; 10 bushels or more \$1.25 per bushel. Sacks included, f. o.

Buy your seed from the grower. From Farmers to Farmers who are fixed to reclean and handle seeds. That's Us.

St. Charles White Corn.

This variety is quite popular with some of our customers in Missouri and makes a good crop in southern Iowa, though we do not recommend it north of Des Moines. It is a handsome, pure white corn, set on a red cob, and the corn appears to be much clearer white than most of the white cob appears to be much clearer white than most of the white color that it makes a high grade of cornmeal, and it is therefore highly valued by the millers. The ears are usually eight and one-half to ten inches in length, sixteen rowed, and the kernels are quite deep and broad, the upper corners of the kernel rounding. Stalk grows to medium height but has quite broad, succulent leaves, and is, therefore, desirable for folder purposes. We believe that our customers throughout the South will be well pleased with this corn as a grain crop, and the south will be well pleased with the corn as a grain crop, and the south will be southern as the south of the southern southern as the southern southern southern as the southern South will be well pleased with this corn as a grain crop, and it is of superior value everywhere, even in Manitoba and the far North, for fodder and ensilage. It has made many friends and each year adds to the number. PRICE: Packet, 5c; opounds, 50c; 3 pounds, 60c, postpaid. By freight, peck, 40c; bushel, \$1.40; 2 bushels or more, \$1.30; 10 bushels or more \$1.30; 10 bushels or more. more \$1.25.

Champion White Pearl.

This was undoubtedly the best variety of white corn before the introduction of the Iowa Silver Mine. It is recognized and catalogued as a leading standard variety of medium sized early white Dent corn, suitable for general crop. Matures in 115 days; is prolific; the grain is deep and wide, with small cob. The stalk is short and thick, and roots very deeply, with ear growing very low upon it, thus standing our severe storms and drouth well. Desirable for milling, and very largely grown for that purpose throughout the South very largely grown for that purpose throughout the South.

If you want some good, palatable cornmeal, grow a little of the "Champion White Pearl" and have it ground. PRICE: Packet. 5c; pound, 25c; 3 pounds, 60c, postpaid. By freight, peck, 40c; bushel, \$1.50; 2 bushels or more, \$1.40; 10 bushels or more, \$1.30.

Reid's Yellow Dent.

Ear is of excellent shape, nearly cylindrical, tapering ly to tip; length about ten inches. Kernels firm on cob, Ear is of excellent shape, nearly cylindrical, tapering slowly to tip; length about ten inches. Kernels firm on cob, eighteen to twenty-four rows with narrow space between rows. Color: medium yellow with red cob. Ear is quite solid and rather smooth. Matures in about 110 to 120 days and yields well although not equal in this respect to some other sorts. PRICE: Packet, 5c; pound, 25c; 3 pounds, 60c. postpaid. By freight, peck, 40c; bushel, \$1.50; 2 bushels or more, \$1.40; 10 bushels or more, \$1.30.

Iowa Gold Mine Corn.

It is early ripening, only a few days later than "Pride of the North." Golden yellow, as handsome as gold: grain is It is early ripening, only a few days later than "Pride of the North." Golden yellow, as handsome as gold; grain is very deep, cob small, and therefore dries out very quickly as soon as ripe. Seventy pounds of ear corn makes sixty pounds of shelled corn and in hauling to market it weighs out more to the wagon than common varieties. We have shelled selected ears of this variety which produced sixty two pounds of shelled corn and only eight pounds of cobstothe bushel. It matures perfectly in southern Minnesota. We can most confidently recommend it. See a sample before buying elsewhere. PRICE: Packet. 5c; pound. 25c. 3 pounds, 60c. postpaid. By freight, peck, 40c; bushel, \$1.50; 2 bushels or more, \$1.40; 10 bushels or more, \$1.30.

Iowa Yellow Dent.

We always advise farmers to select the best named varities in buying seed corn, and believe it pays them in the long run. This year, however, there are thousands of farmers in need of seed corn, and their main object is to secure at a low price a nice grade of good yellow corn which is well matured, thoroughly tested, of strong vitality, and will produce a good crop of sound corn. While this corn is not equal to our best named varities, still we believe you will find it superior to nine-tenths of the corn in your neighborhood. At our price it will cost you only about 15 Cents Per Acre to plant your

fields with this variety and it will pay you well to order sufficient for your planting. PRICE: Peck, 40c; bushel, \$1.35: 2 bushels or more, \$1.25; 5 bushels or more, \$1.15; 25 bushels or more, \$1.00.

Pride of the North.

The ears are eight to nine inches long, with small cob and kernel; seventy pounds of ears will make sixty pounds of shelled corn. Color: bright orange and very uniform. Will ripen in ninety days and matures in this latitude when planted in June. PRICE: Peck, 50c; bushel or more, \$1.55; 10 bushels or more, \$1.50.

GIANT FODDER CORN.

BEYOND ANY DOUBT, we are strictly in it on the best Fodder Corn in existence. It is pure white corn, cropping as high as fifty tons per acre, but not over-large and coarse stalks as some varities are. It is well adapted to any section where silo's exist, and is especially popular with dairy far-

mers, to whom we have sold thousands of bushels of this corn for ensilage purposes. It grows very tall and leafy. Drill one and one-fourth bushels to the acre in rows three and one-half feet apart. PRICE: Peck. 30c; bushel. \$1.00;10 bushels and over. 90c per bushel. Bags included, f.o.b. here.

Wonders of the Corn Crop.

Very few appreciate the possibilities of the corn crop and the difference between a big crop and the average. This difference is largely made from planting ordinary or pure bred seed corn. Let us start with just one kernel of corn and base our figures on the average crop of the prize winners in the great corn contest. 176 bushels per acre:

1st. year. Plant 1 kernel Iowa Silver Mine, produce one and one-fourth pounds shelled corn.

one and one-rourd pounds shelled corn.

2nd year. Plant one-fifth acre Iowa Silver Mine, produce thirty-five bushels corn.

3rd. year. Plant 280 acres Iowa Silver Mine, produce 49,280 bushels corn.

4th year. Plant 394,240 acres Iowa Silver Mine, produce 69,386,240 bushels corn, or sufficient to fill the largest elevator in the world about fourteen times, as a product in four years, from only one kernal of Iowa Silver Mine.

As a comparison, take the average crop of the United States, twenty-nine bushels per acre:

Ist year. Plant 1 kernal ordinary corn, produce onehalf pound shelled corn.

2nd year. Plant one fourteenth acre ordinary corn, produce two bushels corn.

3rd year. Plant sixteen acres ordinary corn, produce 464 bushels corn.

 $4{\rm th}$ year. Plant 3,712 acres ordinary corn, produce 107,648 bushels corn.

Thus at the end of only four years the Iowa Silver Mine has produced 644 times as much as ordinary corn. Do you wonder that some farmers get rich while others in the same locality barely make a living.



IOWA SCORE-CARD FOR CORN.

Scale of Points.

1.	Trueness to Type or Breed Characteristics	10
2.	Shape of Ear. The shape of the ear should conform to variety, type, tapering slightly from butt to tip, but approaching the cylindrical.	5
3.	Color—(a) Grain	5
4.	Market Condition	5
5.	Tips	10
6.	Butts The rows of kernels should extend in regular order	10

Butts
The rows of kernels should extend in regular order over the butt, leaving a deep depression when the shank is removed. Open and swelled butts are objectionable.

Kernels—(a) Uniformity of.

The ear should be from 9 to 10 inches in length.
Circumference of Ear.
The ear should be from 7 to 7.5 inches in circumference.

	10.	Space—(a) Furrow between rows	5
,		The furrow between the rows of kernels should be small. Space between kernels near the cob is very objectionable.	
	11	Proportion of Corn to Coh	15

The proportion of Corn to Cob. 15
The proportion of corn to cob is determined by weight. Depth of kernel, size of cob, and maturity all affect the proportion. 100

Iowa Rules for Judging.

1. LENGTH OF EAR.—The deficiency and excess in length of all ears not conforming to the standard, shall be added together, and for every inch thus obtained a cut of one point shall be made.

excess in circumference of all ears not conforming to the standard shall be added together, and for every two inches thus obtained a cut of one point shall be made. Measure the circumference at one-third the distance from the butt to the tip of the ear.

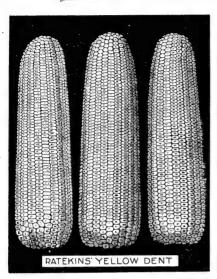
3. PROPORTION OF CORN TO COB.—(Per cent of corn should be from eighty-six to eighty-seven.)—In determining the proportion of corn to cob, weigh and shell every alternate ear in the exhibit. Weigh the cobs and subtract from weight of ears, giving the weight of corn. Divide the weight of corn by total weight of ears, which will give the per cent of corn. For each per cent short of standard, a one and one-half point cut shall be made.

4. In judging corn, a red cob in white corn, or a white cob in yellow corn, shall be cut five points. For one or two mixed kernels a cut of one-fourth point; for four or more mixed kernels, a cut of one-half point shall be made. Kernels missing from the ear shall be counted as mixed. Difference in shade of color, as light or dark red, white or cream color, must be scored according to variety characteristics.

5. Each exhibit should consist of ten ears of corn.

\$200.00 Cash Premiums.

RATEKINS' YELLOW DENT.



We are very anxious to introduce and have this corn grown, tried, and tested, in every part of the country in 1904, feeling confident that we are placing before the corn growing farmers of this country one of the very best and most productive varieties of corn that has ever before been introduced, and in order to encourage all to try it we are offering as an inducement in CASH PRIZES—

For the Largest Yield from One Acre of Ground	\$50.00	
For the Second Largest Yield from One Acre of Ground For Next Three Largest Yields from One Acre of Ground	20.00	
Total	\$100.00	
For Best Ten Ears of Corn. For Second Best Ten Ears Corn. For Ten Third Best Ears Corn. For Five Fourth Best Ears Corn.	\$25.00 10.00 5.00 3.00	each
Total	\$100.00	

Conditions of Contest.

You pay nothing for entering this contest. It is wide open to every customer who buys one or more bushels of "RATEKINS' YELLOW DENT" Seed Corn from us at our regular list price, except no professional seed-corn grower, seed dealer or seedman will be allowed or considered in this contest.

Full and accurate descriptions of RATEKINS' YELLOW DENT will be found on page 4 of this catalog. Each customer who wishes or anticipates entering the contest should advise us at the time he sends his order for the seed. However, the books will be open and he can advise us of his purpose to enter the contest any time up to the 1st day of July, 1904. When the crop is male you are not absolutely required to continue in the contest except at your own election, but in case you do you will be required to furnish an affidavit signed and sworn to by yourself and two disinterested witnesses showing that the corn has grown from RATEKINS' YELLOW DENT seed which was purchased from us. Said witnesses shall also see the corn weighed between November 1st and November 15th, and every contestant for either or both prizes shall be required to send us at least ten of the best developed ears from the product of his crop. Express charges prepaid. Every contestant can enter for a premium in both classes if he so desires, one entry for best and largest yield, and one for the best ten ears of corn, or he can mask but one entry in one class if he prefers. This is entirely optional with contestant, but each should specifically state his intentions at time of sending the sample ears.

We do not want any man, woman or boy to feel that he is ruled out, except class above named, for any cause whatever, and we especially want every boy that reads this CASH PRIZE OFFER to enter the contest. Whether you get a premium or not, you will be well repaid for the effort. The President of one of the best State Agricultural Colleges in the United States recently told us that 'it was the boys of today that would become the best and most scientific farmers the world has ever known before." BOYS, now is your time and here is your chance. Get in and get in in earnest. Here are TWENTY-TWO PREMIUMS, all worth striving for.

Prizes will be awarded under rules and judges, approved by the President of our Agricultural Association, and the President of First National Bank of Shenandoah, Iowa, and all prizes paid promptly December 1st, 1904.

We handle garden tools and make lower prices than others can possibly do. See particulars in back of book.

SPECIAL PREPAID RATES TO OUR CUSTOMERS.

We have a special prepaid express rate with ALL express companies, whereby IF express packages of Seeds, Bulbs, Fruit Trees and Shrubs are PREPAID here BY US, they will go at the rate of 2 ounces per 1 cent; no package, however, for less than 15 cents. Thus, 1½ pounds will go for 15 cents, 2 pounds for 16 cents, 2 pounds and 2 ounces 17 cents, 2 pounds and 4 ounces for 18 cents, 2 pounds and 6 ounces 19 cents, etc., etc.; 4½ pounds 35 cents.

In addition to this ounce-rate we also have a special pound-rate whereby 5 to 15 pounds can be sent to any Adams, Southern, or Pacific Express office in the United States for about 35 cents, which is the lowest minimum charge on small shipment where PREPAID in advance. This same rate will hold good where there are TWO OR MORE express offices of any other company located at your place. Other and larger packages or shipments will be charged the regular seed or nursery rate, which is 20 PER CENT less than on regular merchandise, and same charges only will be collected at end of route as if prepaid here. But on all small packages or shipments, on which purchaser is required to pay transportation charges, we would ADVISE THAT YOU ALWAYS SEND MONEY ENOUGH, or more than plenty, to PREPAY EXPRESS CHARGES, and if ANY IS LEFT, EVEN ONE CENT, OR ONE DOLLAR, or any other amount, it will be returned to you after charges are paid, and in all cases a STATEMENT AND RECEIPT WILL BE SENT TO YOU, with FULL STATEMENT. Respectfully,

RATEKINS' SEED HOUSE, Shenandoah, Ia.



Stowell's Evergreen Sweet Corn.

We consider this one of the most valuable fodder plants in existence, and stock farmers should all devote some land The stalks are sweet, juicy, rich, tender, and very The leaves, which are very numerous, are large, broad, succulent, and greatly relished by all kinds of stock, being far superior in every respect to a l other kinds of corn. On strong soil it will grow ten to twelve feet high and produce an almost incredible amount of fodder which, when well cured, is quite equal to hay, besides being wonderfully cheaper. It is claimed by dairy farmers that this fodder will increase the milk and cream production greatly and keep the animals in the best condition. It has the further merit of being so sweet and palatable that cattle eat every part of the stalk and leaves. As a green fodder for cutting in the summer, one acre is worth as much as eight acres of ordinary pasture. Of high value also for the hogs, and an excellent plant to plow under for soiling.

If planted exclusively for fodder and forage, set your planter so that by double rowing it, that is after planting once, straddle the rows again with planter and plant at the rate of one bushel per acre. Some people sow in drills with wheat drill, while others sow broadcast at the rate of one and one-half to two bushels per acre. We cannot too strongly urge every farmer, either large or small, to plant a few acres of "Stowell's Evergreen Sweet Corn" the coming season. There is nothing that will produce more, nor as good forage and fodder, as it will. Stock will eat every vestige of it, including the stalks, as clean as they will the best clover hay. It will not dissappoint your best expectations and everything will smile and grow fat that you feed it to, from the family table to the pig pen. PRICE: Per pound, by mail, postage prepaid, 25c; 3 pounds, 60c. By freight or express at your expense, peck, \$1.00; half bushel, \$1.75; per bushel, \$3.00, bags included.





Queen's Golden.

One of the very best and most profitable varieties grown. Its quality and handsome appearance when popped are very noticeable. It pops perfectly white, and a single kernel will expand to a diameter of nearly one inch. The stalks grow six feet high, and the large ears are produced in abundance. Mr. Queen, the originator, says: "It is so far ahead of all others that I have seen or tried as to be beyond comparison in every respect, especially in yield, in sturdy growth, in size, and in color when popped—being a delicate golden yellow." PRICE: Packet, 5c; 1-2 pint, 25c; quart, 40c.

White Rice.

This is a well-known standard variety and the leading sort in all the markets; it's the pop corn that always pops, and the best variety in existence; also the best yielder. Our stock of this is extra selected ears, fully six inches in length, and lots of them on each stalk. PRICE: Packet. 5c; 1-2 pint, 15c; pint, 25c; quart, 40c. Postage prepaid.

Pop Corn.

Though usually regarded as a "boy's crop," the fact should not be overlooked that good profits can be made by growing it largely for market. The three sorts we offer below, "White Rice," "Queen's Golden," and "Mapledale Prolific," are the best sorts and always find a ready sale, in any quantity, at good prices. In addition to the grain crop, the stalk provides a large supply of excellent fodder, being much finer and with more leaves than the large field corn.

We are always ready to buy Pop Corn; when any to sell write us.

Mapledale Prolific.

This remarkable variety originated with Prof. R. L. Wetherell, of Davenport, Iowa, who states: "I selected on my Mapledale Fruit Farm this year ten stalks with 121 ears, or an average of twelve ears to the stalk, one stalk have ing nineteen ears." The stalks grow six feet high and the ears are all large in size, with grains nearly clear white in color. An average ear measured seven and one-half inches long and contained 585 perfect kernels. Pops pure paper white, of fine quality. Be sure to include this remarkable variety in your order for Pop Corn. PRICE: Packet, 5c; 1-2 pint, 15c; pint, 25c; quart, 40c.

Red Beauty.

A handsome variety. The grains are dark red, of great depth, and in shape resemble the White Rice." It is extremely early and very productive, often yielding fifty bushels per acre. It is ready to pop four months from planting. PRICE: Packet, 10c; pint, 25c; quart, 40c, postpaid.

SEED OATS. Viet. STAO



Ratekins' New Sensation Oats.

Our Seed Oats for this season's trade were all hartested, stacked and threshed withblue rails and quality is very five, and we feel sure that our light of the season in ordering their seed from all we have the rest nothing grown, not even potatoes, that will so reddily the south to the consider of climate and soil as Oats, and route of the season are of the best improved varieties of our seeds at horoughly recleaned and graded, and absolutely seed than ask our weel seed, trash, or other particles of amplific million of the seed of the seeds of t

Ratekins' New Sensation On the Earliest of all Oats.

Are the kind to grow for sure croppers. Our Sensation Oats" are noted for vigorous growth, and this to see an affect them so much as less vigorous varieties. The grain is large, white, plump, with thin hull, running over which often eight to ten pounds; we unreservedly recommend our "Sensation Oats."

They will yield sixty to eighty bushels per acre in ordinary farm cultivation and more under favorable conditions. We don's ask you to base your hopes on 2001 18 ft of bushels per acre as you will see claimed in some nearly reasonable believe we are dealing with intelligent peoble and they realize such yields are impossible. We aim to gain and they realize confidence of the farmers everywhere, and we should be pleased to have you devote part of your farmers and account of the service sation Oats"—it will pay you.

Who would rather grow a pure, true heavy oat-in preference to the mixed, light, chaffy kinds grown on some farms? It's time to look to quality; sow good seed and you will reap a good harvest. When you sow our "Sensation Oats" you have an insurance policy on your crop. We make it possible for every farmer to get some of these oats by making the price as low as possible. Order them early, and secure some of this seed.

We believe our new "Sensation Oats" to be the best ever introduced for earliness, enormous yielding qualities, and freedom from rust. Hundreds of our customers have written us that, on account of its stiff straw, it stood up perfectly under weather that caused all other varieties to lodge. It is the best and most economical oat for feeding on account of its thin hull, heavy meat, and soft nib. PRICE of "Sensation Oats," \$1.25 per bushel; 10 bushels, \$1.10 per bushel; 50 bushels, \$1.00 per bushel; 100 bushels, 90c per bushel. Bags free.

Ratekins' Early Champion White Oats.

The "Early Champion" are without doubt the earlie, variety of oats to mature that there is in existence; are of short, stiff straw, always standing up well on the richest soil; and these two reasons make them the most desirable nurse crop in existence to sow with grass or clover. In addition to superior quality already named they are among the largest yielders and surest croppers. In fact, they have given the largest yield in field tests at the Iowa Experimental Station, and are highly recommended by that station as superior to any other variety on points named here. You will make no mistake in sowing largely of this variety for field and general crop; they always get there before rust gets other sorts. PRICE: Bushel, 75c; 10 bushels, 70c; 50 bushels, 60c. Bags free.

Change Your Seed Oats This Year.

It will pay you to sell your common oats and sow these improved varieties this year, regardless of the price of seed. In our field this year our "New Sensation Oats" made 68 bushels to acre, and our "Texas Rust Proof Oat" made 65 bushels to acre, while neighboring fields of other varieties under similar conditions yielded only 30 to 40 bushels. The increased yield on a few acres will cover entire cost of seed for your farm.

Irish Victor.

belse trust and proved by a interaction of productive variety every brought multiplication of the provided by betseranded and the third that the ball productive variety

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anoithing slds; anoithing franchnew variety was first introduced by us in slagic fluid franchnew variety was first introduced by us in slagic fluid franchnew variety was first introduced by us in slagic fluid f cheffightown to glodge. About one week later in maturing than the common round head oats, thus giving time to harvest the hay crop. They stand out remarkably well, and thus requires less seed to the acre; are almost entirely free from the dust on all kinds of soil. PRICE, peck, 40c; bushel, \$1.00; 2 bushel or more, 90c; 10 bushel or

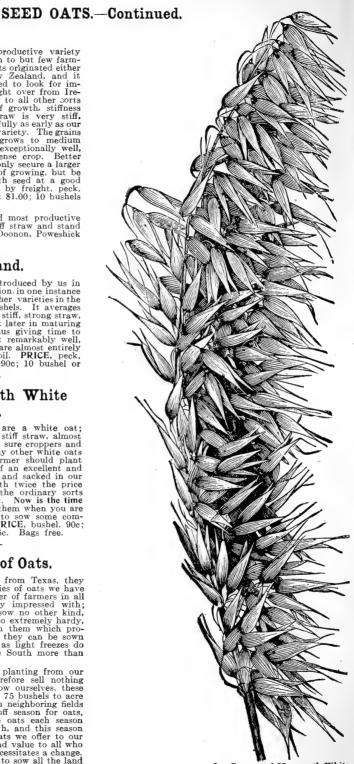
Our Improved Mammoth White Russian Oats.

'Mammoth White Russian Oats' are a white oat; grow vigorous and with a very strong, stiff straw, almost absolutely rust proof. They are always sure croppers and make more big bushels per acre than any other white oats in existence. They are oats every farmer should plant or grow. Our seed of these oats are of an excellent and superior grade and quality, all cleaned and sacked in our two bushel bags. Such seeds are worth twice the price we ask for them, as compared with the ordinary sorts even if you could obtain them as a gift. Now is the time to order your seed, then you will have them when you are ready to sow, and you will not have to sow some common or inferior sorts. Order today. PRICE, bushel. 90c; 10 bushel lots, 80c; 50 bushel lots, 65c. Bags free.

Texas Red Rust-Proof Oats.

Grown by us from seed imported from Texas, they are a valuable acquisition to the varieties of oats we have to offer, and an oat that a large number of farmers in all parts of the country are so favorably impressed with; they get such good results that they sow no other kind, they get such good results that they sow no other kind, they have short spikelets or beards on them which protect them from the extreme hot sun; they can be sown as early or earlier than spring wheat, as light freezes do not effect them; they are sown in the South more than any other variety. any other variety.

We import our seed for our own planting from our growers in Texas each year, and therefore sell nothing to our customers which we do not grow ourselves, these oats made this season on our own farm 75 bushels to acre oats made this season on our own farm 75 bushels to acre while other varieties of common oats in neighboring fields made only about half, this being an off season for oats, We sell thousands of bushels of these oats each season all over the North as well as the South, and this season the crop of our own raising of these oats we offer to our customers is something of real worth and value to all who will sow them. Oats like other seeds necessitates a change. Order early and get enough of this seed to sow all the land you expect to put in Oats. It will pay you. PRICE, bushel \$1.00: 10 bushels, 90c; 50 bushels, 80c. Bags free,



Our Improved Mammoth White Russian Oats.

SEED OATS.—Continued.

The New Lincoln.

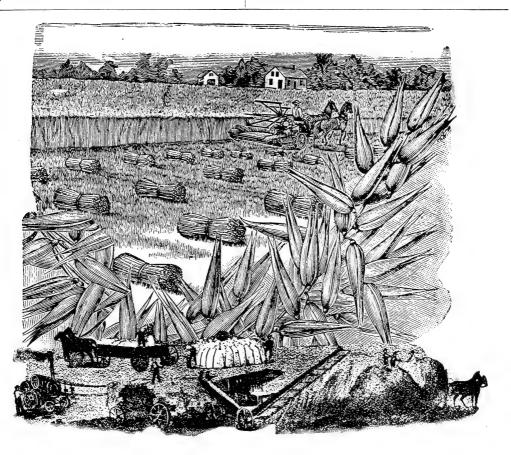
First introduced in 1893. Has stood the test very well and proven to be an excellent variety. No variety has ever had such a boom in advertising as the "New Lincoln," and was introduced in Minnesota with wonderful success. It has done well here, and we have raised it since its introduction with very good results. It is very productive having in all instances yielded more to the acre than any of the standard varieties, in one case yielding

in one case yielding
174 bushels from a single bushel of seed. It is very early
and thus far proven itself dust-proof. It stands up remarkably well. On account of its thin hull, heavy meat
and soft nib, it is a desirable variety for feeding. For
oatmeal or grinding it is exceptionally valuable. Choicest
stock feed. The above is a description from the originator. We will say that this is a very good oat and has,
as is stated, stood the test well. We have grown it for
several years past, and it has done well and it is a splendid
variety and to those who want that kind will guarantee
it genuine and pure. PRICE, bushel, 90c; 10 bushel lots,
80c; 50 bushel lots. 65c.



Silver Mine.

A very popular variety in some sections and said to yield immense crops in some places, but "Our Sensation," "Lincoln" and "White Russian" do much better in other localities. The grain is heavy, plump and has a thin hull. It is quite hardy and vigorous and will undoubtedly please you. Our seed is pure, grown from headquarters stock and we think it is unsurpassed. It is bright, nice, and tests 98 per cent. PRICE, peck, 35c; bushel, 90c; 2 bushel or more, 80c; 10 bushel or more, 70c.



SEED WHEAT.

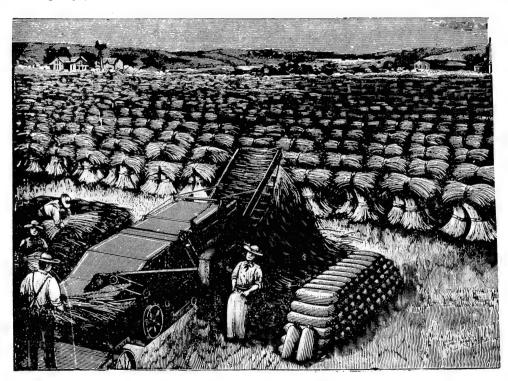
Haynes' Pedigree Wheat.

We cannot too highly recommend this grand new variety as being the best kind of Spring Wheat in existence and are sure it will please every one who tries it. It was originated by Mr. L. H. Haynes, who spent eight years in selecting and improving it in his garden, each year choosing all the largest and best heads and discarding all the balance. This continued selection has had the effect of improving it in vigor, size of head and quality. For the past few years he has been growing it as a farm crop, taking the greatest pains each season to keep it strictly pure by going through the fields and removing everything that was not of ideal quality. He now has a variety which is sure to please all wheat growers. The heads are very large, well filled out, the kernel is hard, the plant stools greatly, and, under ordinary favorable conditions will yield 40 to 50 bushels per acre. It is an improvement on Blue Stem Wheat, and fully five days earlier in maturing. We most highly recommend this variety to customers everywhere in the wheat growing belt, and are sure it will greatly please them in every respect. Not

only in the Northwest where wheat is the main crop, but everywhere and under all conditions has this pedigree Blue Stem Wheat proven itself superior to other varieties, outyielding them all. PRICE, packet, 5c; pound, 25c; 3 pounds, 60c, postpaid. By freight, peck, 65c; bushel, \$2.00; 2 bushel or more, \$1.85.

Blue Stem Spring Wheat.

The "Velvet Chaff or Minnesota Blue Stem Spring Wheat" does the best throughout the spring wheat growing country. It is a remarkable semi-hard spring wheat, yielding large crops and is free form rust. Our millers pay more for it than for any other sort. It is fully equal to the old Fife Wheat and yields a very much larger crop. Our seed this year is very fine and we are sure it will please our customers. It is recleaned and graded and you will find it absolutely free and clean, clear from all oats and other noxious seed. PRICE, pound, 20c; 3 pounds, 50c; By freight, bags free aboard the cars here, bushel, \$1.25; 5 bushel or more, \$1.20; 10 bushel or more, \$1.15.



WINTER WHEAT.

When you are interested in Fall or Winter Wheat, write for our Special Winter Wheat Catalog, giving full description of our well known varieties, also our Imported Malakoff Winter Wheat Will be out of print about August 1st. Mailed free for the asking. Don't fail to sow some of our Winter Wheat this fall.

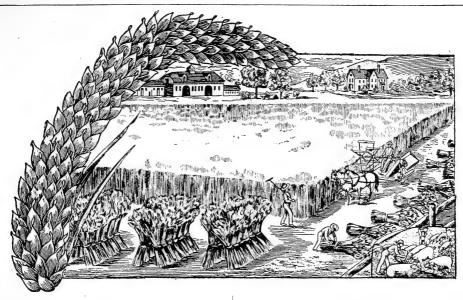
MONSTER RYE.

We consider Winter Rye one of the most important of all farm crops. In the first place it is a sure cropfailures being almost unknown. Every farmer should have at least a few acres of it. It is usually sown in the fall and as it grows very vigorously will furnish pasture till late in the fall and also early in the spring before other grasses have begun to make a growth. For this reason it is of great value to dairy farmers. Some farmers claim that it produces a large grain crop from its having been pastured, if the pasturing is not continued too late in the spring. If sown very early in the spring-it makes an early and abundant pasture but will not make a grain crop.

Our "Monster Rye" is of extra quality and we are sure it will please you no matter whether you want it for pasture or a grain crop. PRICE, bushel, \$1.00; 5 bushels, or more, 90c; 10 bushels or over 75c.

SPRING RYE.

Distinct from the Winter Rye; grain of finer quality and more productive; and can be successfully grown in any latitude. It is now being largely sown in the North in the place of oats, being a more profitable crop on account of the production of nearly four times the straw. PRICE, pound. 25c; 3 pounds. 60c. postpaid. By freight, bushel, \$1.50; 2 bushel or more, \$1.40; 5 bushel or more, \$1.25.



Success Beardless Barley.

Earliest barley known. The straw is about the height of common barley, but better, and will stand up on any of common barley, but better, and will stand up on any land. With good land and season has produced 80 bushels per acre. Sow as early as you can; frost does not hurt it. Many farmers will not grow barley on account of the long harsh beards which are so disagreeable in threshing, although it is a profitable crop. This is beardless and as easy to grow and handle as oats. It has hulls like the Manshury or any other old variety-and is a heavy cropper, yielding from 50 to 75 bushels per acre and the quality is excellent both for maturing and for feeding hogs and other stock. Seed is scarce this year. PRICE, by freight, bushel, \$1.25; 2 bushels or more, \$1.20; 10 bushels or more, \$1.00. Bags free.

Manshure Bearded Barley.

This is an old well known six-rowed variety introduced by Professor Henry, of the Wisconsin Agricultural Experiment Station eleven or twelve years ago. Since then it has been the standard and most popular barley ever introduced. It has been worth millions of dollars to the farmers in the barley growing states. It is a barley of wonderful productiveness and is not surpassed as a heavy yielder. Its malting qualities are unsurpassed, and on this account always commands the highest market market price. It ripens early and has strong, stiff straw, with long and heavy heads, filled with plump, nice kernels, which are of a pretty bright color, and will not discolor from wet weather. Barley is in better demand than it used to be, and even at a moderate price it is a good and profitable crop to grow. The "Manshure Barley" yields in ordinary seasons 60 to 65 bushels per acre, and in favorable seasons has yielded as high as 80 bushels; figuring able seasons has yielded as high as 80 bushels; figuring only 45 to 50 cents a bushel, it is one of the best paying crops. PRICE, 1 pound, 30e; 4 pounds, 75c, by mail. By freight or express, peck. 50c; 1 bushel, \$1.00; 10 bushels or more, 85c. Bags free.

Ideal White Hulless Barley.

And it, is an ideal that pleases all who try it. The heads are large and well filled with big plump kernels, which are hulless and a great value for feeding. Those who have grown it say that it produces a very much larger crop than any other variety. It weighs 60 to 65 pounds to the measured bushel, while ordinary barley weighs only 48 pounds. The straw is very stiff and strong. It is the handsomest, most productive and the best variety we know of. PRICE, per packet. 5c; pound. 50c; 3 pounds, 75c, postpaid. By freight, per peck, 75c; bushel (48 pounds) \$2.00; 2 bushels or more. \$1.80.

At the prices quoted here we make no charges for bags or cartage on farm seeds. The prices quoted are subject to market fluctuations. Should any seeds seem high, or when customers are in need of large quantities, we will be pleased to quote them, on application, the Lowestate quantities when writing for prices.

state quantities when writing for prices.

Buckwheat

Should be sown about the middle of June, broadcast, using from 1 to 3 pecks of seed to the acre.



New Japanese.

This new sort has proven to be much earlier and more productive than any other variety, Grains very large and of a rich brown color. It excels all in yield and earli-ness. **PRICE**, postpaid, pound, 25c; 3 pounds, 60c. By express or freight, peek, 40c; bushel, \$1.50.

Silver Hull.

A very good and popular variety. The grain is of a light gray color, is rounder than the common variety, has a much thinner hull, matures earlier and yields a half more to the acre. PRICE, postpaid, pound. 65c; 3 pounds, 60c. By freight or express, peck, 40c; bushel, \$1.50.

SPELTZ.

A Valuable New Grain from Russia.

Has proven of great value and it is now listed by almost all of the leading seedsmen. It is botanically known as Triticum Spelta or Emmer, and is supposed to be the grain grown in Egypt in the time of Moses. It is mentioned several times in the Bible. For centuries past it has been grown in a limited way in eastern Russia near the Caspian Sea, its value not being known to the civilized world. Nine years ago an emigrant from there brought some to this country, and it yielded more than wheat, rye, barley or oats. It is of high value for feeding and will make a fair grade of flour somewhat similar to rye. Will grow well and produce immense crops on poor soil, and dry weather appears to have no effect on it. It will make a good crop with almost any condition of soil or climate. It makes excellent pasture and good hay if cut at proper season. Yields 70 to 100 bushels of grain to the acre besides several tons of the straw which is good for feeding. The grain is claimed to be much richer than corn for feeding and of superior quality for fattening hogs. cattle, sheep, poultry, etc. It may be sown in the fall but is usually sown in the spring, 50 to 75 pounds per acre. It stools out wonderfully. PRICE, by freight, peck, 50c; bushels or more, 90c.

FIELD PEAS. Southern Cow Peas.

Field peas are largely grown in the Southern States, both as a hay crop and a fertilizer, in which respect they are of great value. The peas may be sown in corn at the time of last cultivation; or after a crop of early potatoes. They may be sown broadcast at the rate of one and one-half bushels per acre, or they may be planted in rows about three feet apart with a complanter. This will require about one-half bushel of seed per acre. The cow peas, by their rapid, rank growth, keep down weeds and put soil in good, friable condition for the next year's crop, increasing the fertility of the soil to a remarkable extent. The vines furnish an excellent green food for milch cows until frost, or they may be cut and cured for hay; or a very profitable way to dispose of the crop is to turn hogs into the field at the time the first peas are ripening. They readily eat the foliage and well filled pods, and thrive amazingly. Or the entire crop may be plowed under as a green manure.

Whippoorwill—An early variety, and the favorite in this section. PRICE, peck, 75c; bushel, \$2.50.

Clay—A rank and rapid grower, but later than the Whippoorwill. PRICE, peck, 75c; bushel, \$2.50.

EARLY AMBER CANE.

Amber Cane in recent years has attracted great attention as food for live stock, and is now recognized for its great value and adaptability as such. Its

its great value and adaptability as such. Its great merit as a food has become known and is here to stay, being very generally known and appreciated. The demand is increasing more and more every year and each year ten fold more than the last. It is profitably grown everywhere, from Manitoba to Mexico, on any good corn land and is not affected by drouth as other crops are, but produces wonderful forage crops rain or shine. As a fodder plant it is the most productive and economical plant in existence, and of the very best quality. Being sweet tender and nutritious, it is greedily eaten by cattle, horses and hogs. Dairy men find that cows give more and richer milk from its use than any other food, and it is claimed by some that as high as twenty-five, thirty and even fifty tons of the green fodder have been grown from one acre. It can be cut several times during the season if not allowed to grow too large or high, and make a good, sweet hay. Sow 100 pounds per acre for best results. PRICE, per pound, postpaid by mail, 15c; 3 pounds, 50c. By freight, 10 pounds, \$0c; 25 pounds, 85c; 100 pounds, \$2.50; 500 pounds or more, \$2.00 per 100 rounds.



Speltz

Early Amber Cane.

Write for prices on large quantities of these seeds as they are subject to market changes and we will always quote you lowest prices.

BROOM CORN.

Improved Evergreen.

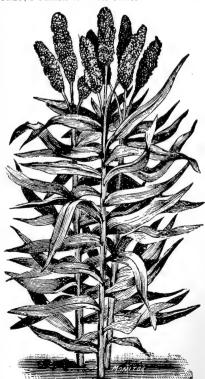
For length, strength and straightness of brush this variety is unexcelled. It is of light green color without the slightest reddish tinge. It makes far the best brooms of any grown. Height, 7 to 8 feet. PRICE, by mail, postpaid, 30c per pound. By freight, peck, 60c; half bushel, \$1.10; 1 bushel, \$1.75.

Dwarf Evergreen.

This is a popular variety on account of its being not so liable to blow down and lodge as the taller varieties. Heads are very brushy and make a fine yield. PRICE, by mail, postpaid, 30c per pound. By freight, peck, 60c; half bushel, \$1.10; 1 bushel, \$1.75.

KAFFIR CORN.

This is a most excellent fodder plant, yielding two crops of fodder during a season. It grows from five to six feet high, making a straight, upright growth. The stem or stalk bears numerous wide leaves. The stalks keep green and are brittle and juicy, not hardening like other varieties of sorghum, making excellent fodder, either green or dried, which is highly relished by cattle, horses and mules. The seed crop is also heavy, sometimes yielding sixty bushels to the acre. Both grain and fodder are excellent, the stalk remains tender to the full maturity of the seed. There is no failure about it, as it possesses the quality that all the tribe possess, of waiting for rain without any loss of capacity to yield. The grain is extremely valuable for feeding to poultry and will make a flour that is like wheat. Cultivated the same as our common Indian corn, requiring five pounds of seed per acre. For fodder sow one-half to one bushel, either broadcast or in drills. PRICE, by freight, peck, 50c; bushel (50 pounds), \$1.50; 2 bushels or more, \$1.25; 5 bushels or more, \$1.10.



Kaffir Corn.

Mangels and Sugar Beets.

Extensively grown in all parts of the country for feeding stock. Sow in April and May, in drills three feet apart and thin to ten inches in the row. If your soil is deep and mellow, try the long varieties; if shallow the round kinds will do better. No crop pays the farmer or stock raiser better than mangels; 1.000 bushels to the acre is an ordinary yield, while with good culture 2,000 bushels and over have been grown to this amount of ground. These make the cheapest of foods for all kinds of live stock—horses, cattle, pigs, sheep, chickens, etc. Easily grown and they help to keep stock in good condition and free from disease. Dairymen claim that a bushel of mangels and a bushel of corn are worth more than two bushels of corn. Use 6 pounds of seed to an acre. "GOLDEN TANKARD"—The popular variety. Roots are smooth, of very large size, and of excellent quality. Is a splendid keeper and we heartly recommend this strain of Golden Tankard to all. PRICE, ounce, 55; ½ pound, 15c; 1 pound, 40c; or 5 pounds for one acre, \$1.50.



BEETS FOR STOCK FEED. Mangel Wurzels.

An ever increasing acreage is being planted to stock beets, because of the wonderful results by feeding them as shown by the reports of our experiment stations, and leading farmers and stockmen. Fattening, breeding and milk cattle do equally well on them. With dairy cattle, the flow of the milk is largely increased. About oenfourth of the dairy ration should be of roots. Hog cholera is prevented by their use. Sow in rows two and a half to three feet apart as soon as the ground can be thoroughly worked. Cover seed about one and a half inches, making ground firm over the seed. Thin to eight inches apart, when four inches high. Where many are grown a good drill and cultivator are needed. Five pounds sows an acre. Decidedly a monstrous size beet and of regular shape and quality, nutritious, and valuable as a stock food; blood-red color, very smooth and decidedly improved strain of Mangles. Plant from first of April up to last of June. A good root-crop is essential from which to realize a good profit. PRICE, packet, 4c; † pound, 10c; † pound, 15c; pound, 25c; 5 pounds, \$1.00.



Imperial Sugar.

This is a larger coarser beet than the French White Sugar. It is more like Mangel Wurzel in character, but the white flesh is much sweeter and tenderer. It is sometimes used for the table. PRICE, packet, 5c; ounce, 10c; pound, 15c; pound, 35c.

Golden Tankard.

Best for dairy farming. Considered indispensable among English dairy farmers; it is stated by them that they are able to obtain a higher price for milk when feeding cows on "Golden Tankard." Sheep thrive on it. Other mangels cut white, circled with yellow, but "Golden Tankard" is of a rich, deep yellow throughout. Early, hardy and a heavy cropper, for on account of its shape the roots can be left standing close in rows. PRICE, packet. 5c; ounce, 10c; ‡ pound, 15c; pound, 35c. By express, not prepaid, 5 pounds, \$1.50.

French Yellow Sugar.

Grows to a large size; roots half long, yellow and sweet. Excellent for stock feeding. PRICE, packet, 5c; ounce, 10c; † pound, 15c; pound, 40c.

How we Serve Our Customers by Mail.

If you live a thousand miles away your seed buying can be done as easily and satisfactory as if you lived in reach of our Seed House.

Seed House.

This is because we give personal and careful attention to the filling of each order. If you are undecided as to the merits of a vegetable you can leave it to our judgment and we will send you a variety we know will give satisfaction.

PUMPKINS.

We place this among our field seeds as they should be grown in every corn field. Hundreds of loads of pump-kins can be grown without the cost of a cent for use of land, and but very little cost to plant, as they need no tending further than what is needed in caring for the corn. Some plant them by putting the seed in one of the planter boxes and making the hole one size larger; others wait until corn is plowed the first time and plant with a hoe. Either way is good, and we think it would pay to use both methods of planting, part one way and part the other.

Connecticut Field.

This is widely known as Yankee Cow Pumpkin, and there is no variety that will do so well among corn, Plant them on your richest corn land and you will be amply repaid. PRICE, pound, 15c; in 10 pounds lots, 12c per pound.

Kentucky Field.

Or sweet pumpkins. These are the thick meated sweet kind that are used for pies. They are extra good for stock but do not always thrive as well in corn. Some seasons they do fully as well as the other sort. Many farmers plant a patch of them by themselves on an acre or two of land and it pays them, too, as they keep it up year after year. We price these extremely low as it is much harder to save the seed as they are very much smaller. PRICE, pound, 25c. postpaid. By freight or express, 5 pounds, 16c per pound; 10 pounds, 15c per pound.

SPECIAL PUMPKIN OFFER.

We want every one of our farmer friends, and that means all who receive this book, to plant pumpkins this year, and will make special prices as fol-

5 pounds Connecticut Field 5 pounds Kentucky Field }\$1.25.

10 pounds Connecticut Field | \$2.25. 10 pounds Kentucky Field | \$2.25.

Dwarf Essex Rape.



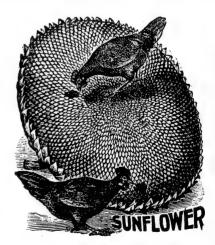
The Most Popular and Profitable Forage Plant in Existence.

The demand for "Dwarf Essex Rape" is increasing four-fold every year, and everywhere it gives the greatest satisfaction. It is easily grown everywhere and is unsurpassed as a forage plant for hogs, cattle or sheep. They eat it greedily and seem to prefer it to any other pasture

during the summer and until late in the fall or early winter. Can be sown early in the season to provide early pasture for sheep and swine; or sow in small grain a week or so before cutting to provide pasture after harvest; or sow on the stubble; but it is usually sown in June, July or August with corn or potatoes, or on well prepared land alone for summer and fall pasture. Makes a wonderfully productive pasture for sheep, hogs or cattle, and they gain flesh so rapidly that they soon "weigh like lead." While it is an ideal food for sheep, still it is of equal value for hogs and cattle, as they are very fond of it. It is extremely cheap, having yielded twenty tons of fodder per acre. In the east it is usually sown in drills, two or three pounds per acre, and cultivated, but in western states it is almost invariably sown broadcast, four to five pounds per acre, and it grows so rapidly that all weeds are quickly smothered. When it is sown as a secondary or catch crop after small grain has been harvested, it is well to disk the ground thoroughly immediately before sowing. The United States Department of Agriculture claims that it adds greatly to the fertility of the soil for the following grain crop. One Nebraska farmer says that he sowed only three pounds per acre on a four and one-half acre field, and five weeks after sowing he turned eighty head of hogs and forty pigs into the field, and they pastured there constantly until October. The plants grew so rapidly that at no time could he tell where the hogs had been, twenty feet away from the gate.

Our stock is the True "Dwarf Essex" imported by us in carload lots direct from the best grower in England. Beware of low prices on rape seed this year, as some unscrupulous dealers last year submitted German rape which can be sold at less than half price, but it goes quickly to seed and is worthless for forage purposes. Every one of our customers was pleased last year. PRICE, packet, 5c; pound, 30c; 3 pounds, 75c, postpaid. By freight, 5 pounds, 50c; 10 pounds, 85c; 25 pounds, \$1.75; 100 pounds, \$6.00. Ask for circular on growing rape.

Mammoth Russian Sunflower.



Largest Sunflower. This without doubt one of the best paying crops that can be raised. Seeds are the best of food for poultry and is much cheaper to raise than corn. Stalks, which grow very large, make excellent fire-wood. It is also said to afford protection against malaria. PRICE: Large packet. 5c; pound. 20c; 3 pounds, 55c. By freight, 10 pounds, 70c; bushel of 25 pounds, \$1.50.

Seed Flax.

A very profitable crop and it pays to own your own seed. Price subject to market changes. PRICE, pound, 25c; 3 pounds, 60c. By freight, peck, 65c; bushel, \$2.15. Ask for price in quantity.

PENCILLARIA.

"Pencillaria," the greatest of fodder plants.

Look at the immense height and density of it. It is simply a 20th Century Wonder and when cut and shocked it looks as if the shocks cover half the ground. It was planted for seed purposes, one grain every three feet, in rows which are three and a half feet apart, same as corn. There was a heavy rain fell (almost a flood) when it was about one inch high, and being on the hillside, and soil loose, washed over the young and tender plants until we did not have half a stand. What was left did not average a hill every six feet. It stooled wonderfully and with an average of 75 stocks from each plant-almost a little shock. The boys that cut it, jokingly remarked that if it had been planted thick for feed, we would have been compelled to rent more land than the seed farm to shock it on. It may be cut two or three times and there is no exaggeration in saying that five to fifteen tons per acre could easily be secured every year. We have reduced the price to such an extent that every reader of the Catalog can afford to plant and raise it. Take our word for it and grow some and you will thank us for urging you to buy.

Description.

The most productive hay and fodder plant in cultivation. This plant is worthy of the careful consideration of every progressive farmer, dairyman, stockman and poultryman in the country. This is a native of Central America and the Tropies but has been tried in this country to such an extent that it can be ranked as one of the most valuable plants that can be grown for fodder, hay, or ensilage. It is a new foliage plant and is creating a great sensation in its marvelous product-

phant and is cleaning a great sensation in its marvelous productiveness and wonderful qualities. It is an annual, producing a heavy growth of broad dark green leaves closely resembling common corn.

As a Forage Plant.

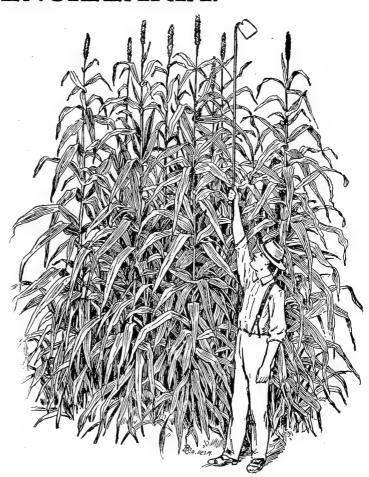
It has a nutritious value equal to such well-known plants as cane and Kaffir Corn, while far surpassing them in productiveness, for if let fully develop it will attain the height of 12 to 14 feet, having many heads completely covered with seeds.

As a Hay Crop

It is rapid growing and is unequaled. It has a plant shooting out like stools of wheat and growing so rapidly that in five or six weeks it is ready to mow and can be cut several times during the season. It produces an enormous amount of feed. For hay purposes it should be very thinly sown in drills 12 to 18 inches apart, drilling seed six or eight inches. If sown broadcast, sow about three pounds per acre or as thin as turnip seed. Thus you will see that the cost per acre is very light indeed.

As a Forage Plant.

For this purpose it should be planted or drilled three or three and one-half feet apart, standing eighteen inches apart in drill. When high enough cultivate the field thoroughly as this may be the only opportunity as it grows so fast it may



PENCILLARIA.

be so dense you cannot cultivate it later. When in blossom it is five or six feet high and ready to cut for fodder. At this stage it will sprout up again and provide a second growth under favorable circumstances.

As a Green Food

It is a most nutritious food and relished by all stock, horses, cattle, or hogs, being all they require for perfect food. An acre if cut and given to stock, will support four cows and other stock in proportion, from the time it is thirteen inches high to the end of the season. It can be grown as far north as Canada.

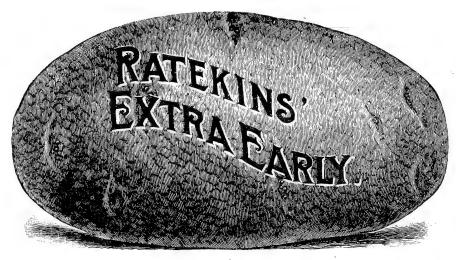
We say to one and all that you can not possibly afford not to try some of this wonderful food-producing plant, so we urge you if you have your own best interests at heart try a field of this great plant this season. PRICE: Goodsized packet, containing 1 ounce, enough for small trial. 20c; 3 packets. 50c; per pound, postpaid, 75c; 2 or more pounds, 60c per pound, postpaid; 10 pounds by express or freight at customers' expense, 50c per pound.

One Horse.

If you only keep one horse and have only one lot, it will pay you to get at least one ounce of "Pencillaria" and raise enough feed for it. The more horses or cattle you have, the more it will pay you to get some of this great forage plant.

Seed Potatoes.

IT PAYS TO CHANGE SEED EVERY YEAR.



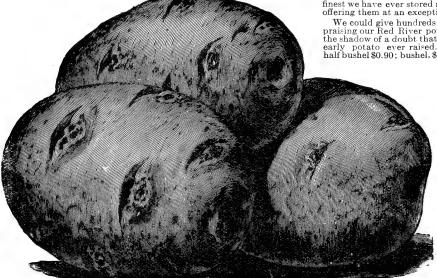
Ratekins' Extra Early.

The finest in quality of all early potatoes, and the ear-We have tested it thoroughly for liest variety of good size. many years, and still find it as early as the very early small southern sorts under the same conditions, while it produces larger and finer tubers. The potatoes are oblong in form, with very pale brownish skin with few eyes. The cooking of Ratekins' Extra Early is all that could be desired, it being the very finest variety that we have ever grown. It is the best variety for truckers, as it ripens very evenly as well as early. The tops die down quickly as soon as the crops are matured so that the potato may be dug early and the land planted to second crop for succession. By freight at purchaser's expense, peck 75c; half bushel, \$1.50; bushel, \$2.75; 5 bushels or more, \$2.50 per bushel.

Early Rose.

Grown on Red River Valley of North Dakota. Fancy hand-picked, selected stock, smooth and nice. For several years past we have been having these grown in the noted Red River Valley, about 500 miles north, and careful tests Red River Valley, about 500 miles north, and careful tests have proven them to be fully ten days earlier than our Iowa grown stock. This is a great advantage to the gardener and puts this variety at the head of the list of extra earlies. They are all of good average size, strictly pure, smooth, and entirely free from scab and rot. In our tests they are positively the earliest to mature their entire crop of any variety we have ever had and outyield others about two to one. This is a standard variety. Don't plant Iowa grown stock when you can obtain these, as the result our customers obtain from this seed is wonderful. One prominent market gardener, who raised a great many varieties reported that gardener, who raised a great many varieties reported that our Early Rose beat them all. We bought our stock early from the most reliable growers and we can honestly say our present stock of several thousand bushels is the finest we have ever stored away for seed and are

offering them at an exceptionally low price. We could give hundreds of testimonials, highly praising our Red River potato, and there is not the shadow of a doubt that they are the greatest early potato ever raised. PRICE: Peck, 50e; half bushel \$0.90; bushel, \$1.75; 5 bushels or over, half or the property of the p \$1.70 per bushel.



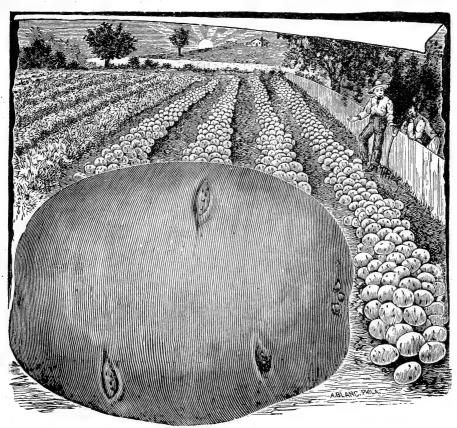
Early Rose Potato.

Northern Grown Seed Potatoes.

Nopotatoesgrown can compare with those produced in the north, eitherfor vigor and freedom from disease, or producing and long keeping qualities. Our seed potatoes have been carefully and especially grown for seed. Last season was rather unfovorable for growing potatoes, but we are pleased to say that the quality of our stock is as fine as was ever grown.

SEED POTATOES.—Continued.

Early Ohio Potatoes Our Specialty.



Early Ohio.

Early Ohio.

Early Ohio is the most popular early potato in the country. We have more calls for it than any other variety. Every potato grower knows what it is, and knows just about what it will do in his locality. It is the standard extra early the country over, and other varieties are measured by it. We will venture to say that not one farmer in ten, the county over, who thinks he has Early Ohio has pure stock. Most of them do not know they are mixed. But Early Ohio is an old variety and has become frightfully mixed throughout the United States. Farmers and market gardeners better sell off their own Ohios and get some of our improved grown from Red River Valley seed. We consider our stock of Ohios to be the earliest, purest, and altogether the handsomest stock of Early Ohio potatoes to be found anywhere. They are grown under conditions that make them cost more than common stock. They are selected with the utmost care and the result is grand, such as to delight everyone who Early Ohio is the most popular early potato in the counknows and appreciates a good potato. Every one of them is a picture of what an Early Ohio potato should be. PRICE: Peck. 60c; half bushel \$1.00; bushel \$1.75; 5 bushels or over. \$1.70 a bushel.

Write for prices on larger quantities.

Banner Potato.

Introduced in 1891. The Banner is the finest main Crop White Potato on the market, and probably no variety ever in-troduced has made as good a record in so short a time with

all classes of growers on all kinds of soil. None surpass it in uniform handsome appearance. Its shape is a little oblong and slightly flattened, cooking through easily. The eyes are very shallow. The size is large and desirable, very few under market size. Always smooth and regular in form; strong and vigorous from the very sprout. As near blight and scab proof as any. The flesh is very White, and whether boiled or baked has the same fine table qualities—always dry and floury. Season, medium late. Choice Sorted Northern Grown stock. PRICE: Peck, 60c; 1-2 bushel \$1.00; bushel, \$1.75; 5 bushels or over, \$1.70.

Earliest Six Weeks.

This is a new potato of the Ohio type, and it seems to be in great demand everywhere. It is not the heaviest yielder, but is particularly adapted for the early garden, as it will produce good size, round to oblong, smooth tubers, ready for use, everywhere in six weeks from planting, and the tubers will be in good condition for cooking, even when partly grown. Market gardeners and all others who grow potatoes can not afford to be without this splendid early potato. We will say that the Six Weeks is planted by more people who want a few early potatoes in the garden than any other variety in existence. They grow so rapidly and mature so early that the potato bugs havve no chance at all. making their crop, if planted early, before the young bugs become numerous and the yield is always good, considering their extra earliness. PRICE: Peck, 50c; 1-2 bushel, 90c; bushel, \$1.75.

SEED POTATOES.—Continued.

Pat's Choice.

A splendid medium late variety originated in Minnesota. The tubers are long, smooth, and handsome, skin light pink in color, with eyes of a deeper shade, and covered over with a thick netting, which always indicates excellent quality. As is known, Pat is a sharp fellow when it comes to passing judgment on Irish potatoes, and the general testimony is that he knew what he was about when he made his choice. PRICE: Peck, 60c; bushel, \$1.50.

With no other seed is the importance of change more essential than with potatoes, and by using our northern-grown seed you are assured of early maturity, increased yield and vigorous growth. The varieties we list, we think the best and most satisfactory sorts for growing in Iowa and other states of the same latitude, and we have many customers in the north and far south who consider our stock much superior to any other.

Order as early as possible, stating whether you desire them shipped by express or freight, and we will ship as soon as the weather permits. We will ship at any time, when requested to do so, regardless of the weather, but customers in this case must take the risk. Prices are subject to any important market changes. Ask for special quotations on large lots.

Special Offer.

In order to give our customers a chance to try our varieties of Potatoes we offer one peck of each sort except Ratekins' Extra Early, consisting of any three varieties, at \$1.75.

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Advantages of Changing Seed.

There is no other crop that we raise that is so much benefited by the introduction of fresh seed from time to time as the potato. They seem to take on new life and to prosper wonderfully, provided the change is to a well-selected stock, and the further north it is grown the better. Our best customers will not plant their own raising of seed at all, but buy of us every year. They can grow nearly double the crop on the same land that they can from their own raising, and the tubers are smoother, handsomer, and of better quality and more salable on the markets.

Mammoth White Artichokes.

An improvement on the Jerusalem Artichoke. The graetest hog food known. These are attracting much attention on account of their great fattening properties, great productiveness (over one thousand bushels having been grown on one acre), and the ease with which they can be grown. They need not be dug in the fall; the hogs should be turned on them, and will help themselves by rooting for them. One acre will keep from twenty to thirty head in fine condition from October to April, except when the ground is frozen too hard for them to root. They are also said to be a preventive of hog cholera and other diseases, and they are also highly recommended for milch cows, increasing the yield of milk and at the same time improving their condition. Three to five bushels will seed an acre, and they may be planted whole or cut the same as potatoes, one eye to a piece being sufficient. Plant in April or May, in rows three feet apart and two feet in the row, and cover about two inches deep. To destroy them they should be plowed under when the plant is about a foot high, at the time the old tuber has decayed and new ones are not yet formed. PRICE: Pound, 25c; 3 pounds. 60c, prepaid. By freight or express, peck, 40c; bushel, \$1.00.

Clover Seed.

For many years we have made this a specialty, and now have our new machinery for cleaning so perfected that we claim that our grades average better than those of most other markets, and believe that they can not fail to please the most particular. Other seed dealers who have happened to be in our warehouse when we were cleaning clover, have often remarked that the seed looked so nice that they should not reclean it. From these same lots of seed we were cleaning out three to five pounds per bushel of trash, and shrunken clover seed. This makes quite a difference in real value, and our seed is really worth 10 cents to \$1.00 per bushel more than that obtained from most dealers. Crop is short this year. Prices on Clover and Grass Seeds are changing almost daily, so that we are unable to quote prices which will be invariable. Don't fail to write for prices before buying. We issue a price list each week from January to June. If you are in a hurry for seed you can order it and we will send seed to full value of money sent on day order is received. The following are the prices we are selling at on the date this catalog goes to press, January 10, 1903. We pay postage at the one and three-pound rate, larger quantities shipped at purchaser's expense. Trial packets of any variety at 5 cents each.

Mammoth Red Clover.

Also called Sapling or Pea Vine Clover. This greatly resembles the medium Red, but is of much taller and more vigorous growth. The stems are so large and coarse that it is not valued for hay, but nothing equals it for hog pasture, as it will produce an enormous yield and it is of the highest feeding quality. It gives very quick results, making an unequaled crop and is usually considered a permanent pasture grass. If your soil is poor and needs enriching, there is no fertilizer as cheap and good as sowing Mammoth Clover and plowing the crop under. It is the Clover for poor soils. Sow 15 pounds to the acre. At buyer's expense, 1-2 bushel, \$3.75; bushel \$6.75.

Medium Red Clover.

This is the most important of all Clovers, and the standard everywhere for hay and pasture. It is also known as Common Red or June Clover in many sections. Our Iowa

grown Clover Seed has become wildev known for its purity, strong vitality, hardiness, vigorous and healthy growth, and stooling qualities, so that now we receive many orders annually from the most distant parts of the United States, and also from foreign countries. It has been tested by the Agricultural Experimental Stations in various parts of the country and ranks among the highest everywhere. We have many customers in Pennsylvania, New York, and



other parts of the east, who purchase from us annually, although our seed costs them more, freight considered, than the eastern grown. You will find that it does not pay to buy inferior seed containing a mixture of weed seed, dirt, sand, shrunken clover, etc. It pays to have the best. Sow 15 pounds per acre. PRICE: Postpaid, pound, 25c; 3 pounds. 65c. At buyer's expense, 1-2 bushel \$3.75, bushel \$6.75.

CLOVER SEED.—Continued.

Alfalfa or Lucerne Clover.



ALFALFA or Lucerne CLOVER.

Very popular in many portions of the country. Under proper management it will yield from ten to twelve tons to the acre. All classes of stock are exceedingly fond of it. The roots are so long and grow so deep, frost can not heave or throw them out in winter. One sowing will stand for twenty years, and instead of impoverishing the soil, enriches it. Grows on the thinest sandy soil and thrives in greatest

drouth. Sow broadcast, about twenty-five pounds to the acre. Comes up spindling and slowly, and it is necessary to mow the weeds to give it light, but when once established the weeds will be smothered. PRICE, postpaid, per pound 30c; 3 pounds 75c; per peck, \$2.35; per bushel, \$8.00.

Alsike Clover.

This is the hardiest of all the Clover and never winter kills, even in our severe winters. It adapts itself to all kinds of soils, and is capable of resisting extremes of wet and drouth alike. It makes a better and finer hay than red Clover and is much relished by stock. 60 pounds per bushel.

PRICE: Per pound 30c, bushel \$12.00.



ALSIKE CLOVER.

White Clover.

Extra choice seed for lawns. PRICE, per pound 30c, 5 pounds for \$1.50.

Grass Seed.

We desire to call particular attention to the fact that grass seeds are sold in the trade by sample, and each sort is divided into three or four different grades of quality, according to purity, germination, and weight. The price of the best grades is often double that of the ordinary. The Grass Seeds here offered by us are in every case the very highest grades and all thoroughly recleaned on our improved Cleaning Machinery.

proved Cleaning Machinery.

Prices subject to fluctuations. Market prices on application. We pay particular attention to this department of our business. These seeds are selected with special reference to their quality. Purchasers may rely upon our best endeavors to furnish Grass and Field Seeds pure and free from noxious and foreign seeds—has not laid in bins until it became heated or musty—all recleaned with the best machinery to make them choice. On account of the fluctuations on these seeds from day to day, it is impossible for us to establish a fixed price, but purchasers may depend on buying them as low as best quality can be sold for, at date order is sent us, and that we will always send as much seed as money received will pay for. Market prices for the day or special prices on large quantities cheerfully given on application. Express or freight charges always paid by the purchaser, except when sufficient money is sent to pay charges. Bags 15c extra.

Bromus Inermis.

Defies Drouth, Resists Frost. Best Grass of the Age.

It converts waste and barren land into a thing of beauty and profit and adds greatly to the profit of valuable land. The introduction of Bromus Inermis means millions of dollars added to the wealth-producing power of this country. It is a native of Russia, and on the great prairies there this marvelous grass thrives luxuriously. It stands year after year in good soil, yielding enormous crops of excellent hay and furnishes rich and abundant pasturage. Bromus Inermis is an inestimable boon to countries where clover, timothy and other grasses yield a light and decreasing crop of hay. It is thoroughly established and is not an experiment, but is unquestionably a success as it outyields alfalfa and cattle relish it. One sowing will stand for ten years. It grows very thick and so dense that it "will hold up your hat" and will completely eradicate all obnoxious weeds, such as Canadian thistle, wild mustard, cockleburs, etc., in three years time. It is introduced and recommended by the very highest authorities on these questions, so there is no mistake about it.



Bromus Inermis

GRASS SEED.—Continued.

Experimental Grass Station, Garden City, Kan., says:
"We have grown Bromus Inermis successfully and think it
to be the coming grass for the arid regions of the west. We
sow it about April 1, here."

S. M. Tracy, Director Mississippi Experimental Station, says: Bromus Inermis endures the summer heat and drouth much better than the Rescue Grass, and being a perennial is much more permanent. Like nearly all grasses it makes the best growth on rich soils, but even on thin and barren soils it is one of the best. Seed is produced sparingly and is hard to obtain in this country."

Prof. W. M. Hays, Agricultural Experiment Station, nesota, says: "We have had a great many reports from Minnesota, says: persons who have tried this grass, and the consensus of opinion is that we have in **Bromus Inermis** a most valuable addition to our agricultural plants."

Prof. Thos. Shaw, who is highest authority, says: "This grass cannot be obtained too soon by the farmers of the north-west and arid regions. It is very hardy, endures very low temperature, and possesses great power to grow in dry cli-mates. It is well adapted for hay and pasture. The grass comes up quickly in the spring, makes rapid, strong growth, and after it has been cut for hay makes abundant pasturage."

w. J. Spillman, Professor of Agriculture, Washington Agricultural Station, says: "We have had five years experience with Bromus Inermis. We find this grass to be well adapted to the wheat soil in this section of the country. When sown in early spring it makes considerable pasturage in the fall and a large yield of hay the second season, provided it is not pastured too closely the first season."

J. H. Shephard, Professor of Agriculture, N. D. Agricultural College, Fargo, says: "As a pasture it is preferred to timothy by cattle, as shown by a trial where it was fed off more closely than timothy in the same pasture. It has the advantage of being earlier and being green until late in the fall. The fact that Bromus Inermis resists drouth better than other cultivated grasses greatly adds to its value in

This country."

The editors of the following agricultural papers comment very favorably upon Bromus Inermis. Orange Judd Farmer, Chicago, Ill.; Prairie Farmer, Chicago, Ill.; Northwestern Farmer, St. Paul, Minn.; Dakota Farmer, Aberdeen, S. D.; Nebraska Farmer, Omaha, Neb.; Kansas Farmer, Topeka, Kan.; Homestead, Des Maines, Iowa; Wallace's Farmer, Des Moines, Iowa; Breeders' Gazette, Chicago, Ill.; and many others. Could there be any better proof of its value than this?

How to Sow.

Plow the ground thoroughly in early spring, harrow well and sow in April or May, depending on the location. Fifteen pounds per acre of the seed we offer is sufficient, as it is very pounds per acre of the seed we offer is sufficient, as it is very strong in germinating power, while there is much seed on the market of poorer quality and it takes more to produce a stand. Harrow lightly and it will show up for pasture in the fall and will make a splendid crop of hay the following year. We have obtained a good supply of this very best seed that grows and of the new crop, and we are contented with a small profit and do not put it at an excrbitant price. Just a word about quality:—A number of seed-houses claim to be the introducers and the only ones who have the genuine article but to all thinking persons it is plain that such that article, but to all thinking persons it is plain that such talk is "bosh," as no seed firm has a monopoly on anything, for as soon as put out it becomes public property. In the case of Bromus Inermis it is simply imported and is an old established grass of Russia and some of the older countries. All the seedsmen had to do was to send for the seed; so any seedsman can obtain the seed from where it originated or seedsman can obtain the seed from where it originated or buy it in this country where it is raised for seed and is increasing very fast in seed-producing habit. We defy any one to produce better seed than we offer. PRICE: One pound by mail, postpaid, 25c; by freight, 15c; per bushel, 14 pounds, \$2.10; 50 pounds, \$7.00; 100 pounds, \$13.50; 200 to 500 pounds, \$12.00 per 100 pounds.

Meadow Fescue or English Blue Grass.

Succeeds well in almost all soils, from high, dry land to moist, standing the dry summer heat excellently. It is valuable as pasturage grass, being one of the earliest in the spring and latest in the fall. It is very nutritious and greedily eaten by all kinds of stock, and very fattening. Is hardy, never grows in tufts, and being tender and succulent makes excellent hay. It is a perennial, two to three feet high, flowering in June or July. Very scarce this year. PRICE: Pound. 40c: 3 pounds. \$1.00, postpaid. By freight, bushel of 14 pounds, \$1.75; 100 pounds, \$13.00.

Johnson Grass.

As a meadow or hay grass, this variety is highly esteem-As a meadow or nay grass, this variety is nignly esteemed in the south, where during the hottest and driest seasons it can be relied upon to yield heavily. The aggressiveness of this grass has caused it to be considered a veritable curse by some farmers by spreading into cultivated fielfds, but it is highly esteemed by those who understand it. Where it is desired to keep it within bounds, the seed should never be allowed to ripen, as it spreads from the seeds disseminated be anowed to ripen, as it spreads from the seeds disseminated through hay much more than is generally supposed. Besides, when fully ripe, the feeding value is little better than corn stalks, but cut before the seed tops emerge from the sheathes, its value as shown by chemical analysis is better than timothy hay. When cut at time recommended the embyro seeds are unpollenized and imperfect, and are increasely seeds. capable of sprouting, so there is no possibility of introducing this grass where it is not wanted by using such hay. We only advise the sowing of Johnson grass where it is desired to remain as permanent meadow. Should be sown August to October, or in spring at the rate of one bushel per acre. PRICE: 25c pound, postpaid; 10 pounds, 11c per pound; 100 pounds, 10c per pound. Bags free.

Timothv.



Timothy grass, well known to every farmer, stands at the head of all other tame grasses for hay. We are located in a fine country for Blue Grasses, Clover and Timothy, and supply purchasers with the very best quality of seed. Iowa grows more Timothy seed than any state or part of the world. We aim to supply our customers at lowest prices consistent with quality. PRICE: By mail, postpaid, per pound, 10c; 3 pounds, 50c; bushel, \$2.00. Write for prices on large quantities. Bags 15c extra.

We are the largest dealers in this line in Southwestern Iowa, and our trade has been built up by handling only the best grade of new recleaned seed. We have placed thousands of orders and can please you with our choice Iowa grown seed.

grown seed.

Prices. Grass seeds are sold on a very close margin of profit and orass seeds are sont on a very close margin of pront and prices are constantly changing with the market. Should you desire a quantity of anything in this line, be sure to write us for special prices, naming the amount needed. Most kinds of grass seeds are somewhat higher in prices this year, but please remember that our quotations are for our best grades of recleaned seed and we know that price is acleaned. grades of recleaned seed, and we know that price is as low as such grades can be bought for anywhere. At the pound rate we prepay postage. Grain bags to hold seed, 15 cents

Red Top.

This grass is indigenous to nearly all parts of this coun-This grass is indigenous to nearly all parts of this country, although generally found on low ground and marshes. It is a mistake to suppose that it is adapted only to low and wet land, as it will grow abundantly but not so heavy on sandy lands and knolls. This seed has usually been sold in the chaff, but during the past few years cleaning machines for separating the solid seed from t' chaff ave been perfected, and it is thereby possible to or clear or solid seed, known also as "Fancy Red Top." It enters into our mixture well. PRICE: 1 pound, postpaid, 25c; 1 bushel, (14 pounds.) \$1.60; 100 pounds, \$10.00. Bags free.

GRASS SEED.—Continued.

Kentucky Blue Grass.



Very valuable and exceedingly popular in some sections of the country as a pasture grass. It is productive and unusually early in spring, furnishing delicious food for all kinds of stock. It is not easily affected by frost or drouth, is suited to a great variety of soils, succeeding best on a moist, rich meadow. For permanent pastures it is particularly valuable, being of dwarf growth, therefore not so well suited for meadows. Unexcelled for lawns. Our seed is all new crop, best grade, 'Fancy Cleaned.' Sow fourteen pounds per acre for pasture, or sixty to one hundred pounds for lawns. PRICE: Per pound, 30c; 3 pounds, 75c; bushel (14 pounds), \$2.25.

Meadow Foxtail.

A fine grass which is especially well adapted for permanent pasture. It is one of the very first to start growth in the spring, and is of remarkably quick and strong aftergrowth, either when closely cropped or after mowing. It is especially adapted for sowing in low, wet places, in marshes, or sloughs, and an occasional overflow of several days will not harm it.

Many are under the impression that this valuable grass is the same as a wild species commonly known as "Foxtai" or "Squirrel Tail," and are afraid to sow it. If they will read this description carefully they will find it is not similar to this wild grass seed. PRICE: 1 pound, postpaid, 25c; 1 bushel, (14 pounds,) \$3.00: 100 pounds or more, 21c per pound. Bags free.

Note—The seed is very light. 1 ounce containing 76,000 kernels.

Bermuda Grass.

This is a grass that is eminently adapted for the southern states, as it withstands drouth and the scorching rays of the sun better than any other variety. In all tropical countries this grass is highly esteemed for its drouth resisting qualities, and also for the peculiar habit of its growth; the wiry roots of the grass in running over the surface of the ground form a strong fibrous matting. This has caused it to be sown largely for the purpose of finding banks of creeks and dams, etc. For lawns it is also highly prized, as while all other grasses are burned up during the hot season, "Bermuda Grass" will remain green, and if regularly mown it will make quite a velvety carpet. The only drawback is that in winter it looks a little brown, but in the southern states, an all-the

year-round green lawn can be maintained by sowing English Rye-grass every fall at the rate of fifty pounds per acre, and harrowing, or raking into the "Bermuda Grass" sod. "Bermuda Grass" seed should be sown in the spring, as it will not germinate until warm weather comes. As a grass for hay or pasture, it matures and gives its first cutting ordinarily in June. Sow eight pounds per acre. PRICE: 80c per pound; 100 pounds, 70c pound.

Evergreen Mixed Lawn Grass Seed.

This is a mixture of the best varieties of grass seeds suited for growing together in central and northern states, and will make a beautiful, soft, velvety lawn and as handsome and green as an emerald, and is formed of grasses which keep green from early spring all through the hot, dry summer weather until late in the fall. It comes up quickly (about two weeks) after the seed are sown, and after once up it soon spreads to cover the ground and is ready for the lawn mower in six or eight weeks. It roots deeply on any soil and forms a dense, thick turf with no tendency to grow in tufts or clumps. It is permanent, maintaining its beauty for a lifetime, although it is a good plan to give any lawn a top seeding once in every three to five years. This mixture is from new crop, recleaned, pure seeds of the best varities, well suited for even and permanent growth, as good as money can buy. It cannot be excelled for producing a rich, velvety lawn of beautiful dark green color. PRICE: Per quart, (will sow 300 square feet.) 25c; 4 quarts, 85c, postpaid. By freight, per bushel of 15 pounds, \$3.00; 50 pounds, \$8.00; 100 pounds (will sow one acre.) \$15.00.

New Siberian Millet.

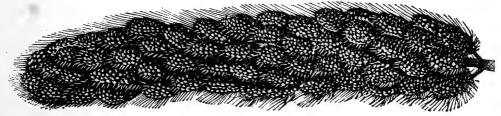
This is a new and distinct variety, having bright red seed, produces a fine crop of hay about two weeks earlier than German Millet, is very leafy and of excellent quality. Sow twenty-five pounds per acre. By mail, per pound 20c; 3 pounds, 50c; bushel, \$1.25. Write us for prices on large quantities.

German Millet.

"German Millet," the true large headed variety and largely grown wherever its value is known. It helps out wonderfully when a short crop of hay is threatened, and produces two to three times as much per acre as timothy or clover. Write us and we will cheerfully quote prices on large quantities. PRICE: Bushel, \$1.25. Bags free.

NOTICE.

This closes our list of field seeds, which is a full one. and we hope you have made up your mind to take in some of the rare bargains we have offered. Our corn descriptions and prices are such that they are sure worth reading about and taking advantage of. Our Forage Plants such as Cane, Kaffir Corn, Pencillaria, Rape, are of such quality and low price that they should surely bring an order. Our Millet is of the best variety and at the price you need not be afraid to get "up against it." Our Barley, Wheat, and Rye, in fact all grains are good and at prices that will sell them; and we always have a good supply. To start with our Grass Seed is unexcelled, and for quality it cannot be surpassed. They are guaranteed not to be excelled by anything, and the prices—they speak for themselves. Our Potatoes are fine and we put a guarantee behind them as being superior to any put out by other Seed Houses. We ask that you examine the price. One and all, there was never a better lot of Farm Seed offered you, and as you can see, you can buy cheaper from us than any other reliable Seed House selling these. Our motto: RELIABLE SEEDS FOR THE LEAST MONEY."





Our stock of vegetable seeds we are sure cannot be exselled either in quality or selection by any firm in the country, as we watch our growing crops with great care, taking pains to isolate and keep pure and true to name. Every variety listed is desirable and has our recommendation. Our packets are, we believe, as well filled as any reliable seed dealer's in the United States, and in fact, a comparison has shown that they contain more seed on the average than those of any other firm whose packets we have secured. We pay the postage at these prices, except on Beans, Peas and Corn at the peck or bushel rates.

We make it a rule to carefully test all seeds as soon as received from the grower, or as soon as they are brought in from our seed farms. We also carry on extensive trials on our grounds by which we are enabled to offer only those strains of seeds which come up to the standard of purity and excellence, and are of the highest vitality, and the result is that we very rarely have complaints as our Reliable Seeds are sure to please.

Why We Can Make Such Low Prices.

We have placed our prices very low and take great pleasure in thus doing as it enables many to change their seed who would not otherwise do so. We have a great advantage over large seed firms located in the city as we grow a great many of our own seeds. We do not then pay freight to ship in or charge such large prices for storing and handling the seed. Whoever heard of farm seeds being raised in a city or very near one. Another advantage, we do not have such heavy bills in the way of expensive catalogs, large advertising bills, rent, help and other expenses that city firms have to pay, so we can sell better seed at lower prices than city seed firms, as it is from grower and producer to farmers and planters with no middleman's profit.

Garden Seeds.

We can furnish garden seeds at the prices on the following list, postpaid, except heavy seeds, such as beans, peas, corn, onion sets, clovers, grains, grass seeds, etc. For these it will be necessary to add eight cents per pound to cover postage. Half pounds sold at pound rates. You may select seeds in packets amounting to \$1.25 for every \$1.00 sent us for seeds ordered in packets.

ASPARAGUS.

Culture.

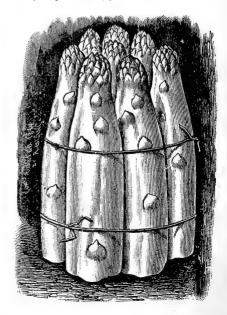
Beds are usually formed by setting plants one or two years old, which can by procured of us. If you wish to grow plants yourself, pour hot, but not boiling, water on the seed and let stand until cool; pour it off and repeat two or three times, with fresh hot water. Then sow in drills one foot apart and two inches deep in light, rich soil. When the plants are well up, thin to about one inch apart, and give frequent and thorough cultivation during the summer. If this has been well done, the plants will be fit to set the next spring. The permanent beds should be prepared by deep plowing or spading and thoroughly enriching the ground with stable manure or other fertilizer. If the subsoil is not naturally loose and friable, it should be made so by thoroughly stirring with a subsoil plow or spade. Set the plants about four inches deep and one to two feet apart in rows four to six feet apart. After the plants are well started give frequent and tho ough cultivation. Early the next spring spade in a heavy dressing of manure, and one quart of salt to each square rod and cultivate well as long as the size of the plants will permit or until they begin to die down. The next season the bed may be cut over two or three times, but if this is done, all the shoots, no matter how small, should be cut. After the final cuttiving, give a good dressing of manure, ashes, and salt. Cultivate frequently until the plants meet in the rows. In autumn, after the tops are fully ripe and yellow, they should be cut and burned. If well cultivated and manured the bed should give a full crop the following season and continue productive for eight or ten years.

Conover's Colossal.

A mammoth green sort of the largest size and of good quality. PRICE: Packet, 4e; ounce, 10e; 1-4 pound, 15e; pound, 40e.

columbian Mammoth White.

A new and entirely distinct variety, that produces shoots which are white and stay white as long as fit for use. It is more robust and vigorous in habit, and throws up larger shoots and fully as many of them as Conover's Colossal, and requires no earthing up in order to furnish the white shoots so much sought after. PRICE: Per packet, 4c; ounce, 10c; 1-4 pound, 25c; pound, 75c.



BEANS.

Postage, 15 Cents per Quart Extra.

Culture.

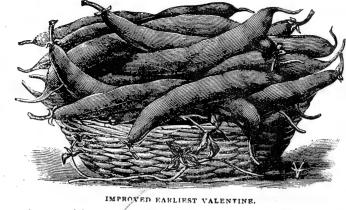
No crop responds more readily to good soil and cultivation than this. The soil best adapted to it is a light. rich, well drained loam, which was manured for the previous crop. If too rank manure is used it is apt to make the plant run too much to vine. Beans are extremely sensitive to both cold and wet, and it is useless to plant them before the ground has become dry and warm. The largest returns will result from planting in drills from two to three feet apart, and leaving the plants two to six inches apart in the row. Up to the time of blossoming they should have frequent shallow cultivation, but any cutting of the roots after the plants come into bloom is likely to cause the blossoms to blast and so cut off the crop. Remember that the cultivation of beans should always be very shallow, and that it is useless to expect a crop from a field so poorly prepared

as to need deep stirring after planting.

Varieties should be selected so as to give a succession both of string and green shelled beans. The wax podded varities will degenerate into a mixture of green and wax podded plants unless there is constant attention given to the removing of any green podded plant which may appear in the

seed crop, and the constant selection of plants of the highest

type for stock seed. Hence it is especially important to use seed from reliable sources only.



Extra Early Valentine.

There is nothing superior to this variety among the green podded sorts, and many prefer it to the wax varieties. Vines erect, with coarse, dark green leaves and large white blossoms. Pods medium length, curved, cylindrical, with crease in back; very fleshy, crisp and tender. Beans medium size, long, irregular, pink, marbled with red. Among green podded varities, there is none, we think, that can compare with our stock of "Valentine" in fleshiness and high quality of pod. Many different strains of "Valentines" are offered under slightly varying names, each claiming to be a great and distinct improvement. We have carefully examined them all, both in trial and large yield, and have none which we were willing to substitute for our stock, which combines all the good qualities. PRICE: Packet, 5c; 1-4 pint, 15c; quart, 45c; by express or freight, 1-2 peck, 75c; peck, \$1.40.

If beans are wanted by mail or express, prepaid, add 10 cents per pint, 15 cents per quart, for charges.

Wardwell's Early Kidney Wax.

One of the earliest, hardiest and most productive of all wax beans. It is nearly a week earlier than the Wax," and yields one-third more, and it is a most entirely free from rust and spots. The pods are long and showy, very tender, stringless, and of excellent quality. PRICE: Packet, Sc; 1-2 pint, 15c; quart, 50c; by express, 1-2 peck. 90c; peck, \$1.60.



WARDWELL'S BARLY KIDNEY WAX.

Challenge Black Wax.

Earlier, more productive and of better quality than the old "B ack Wax." Pods tender, round, fleshy and stringless. PRICE: Packet, 5c; 1-2 pint, 15c; quart, 45c; by express, 1-2 peck, \$5c; peck, \$1.50.

Davis White Wax.

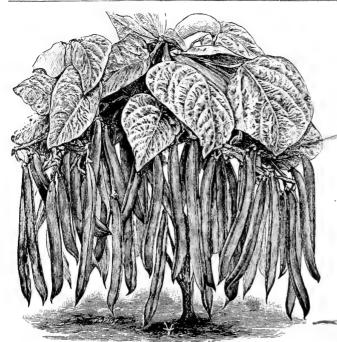
A new white, rustless, productive, wax-podded bean; pods flat, very long, white, straight, and handsome; seeds clear white; excels all others in hardness and productiveness. Valuable for market gardeners' and canners' use. PRICE: Packet, 5c; 1-2 pint, 15c; quart, 50c; by express, 1-2 peck, 90c; peck, \$1.60.

Improved Golden Wax.

In spite of all the new sorts of beans being introduced every year, our trade calls for more "Golden Wax" than any other variety. This great popularity is due largely to the fact that the variety we have is a great improvement on the old "Golden Wax," having larger pods and being much more prolific. This improved stock is one of the handsomest beans we have ever seen, the pods being of dark, rich golden yellow color and of perfect shape. For family or market you can make no mistake in planting them. PRICE: Packet, 5c; pint, 25c; quart, 45c; by express, 1-2 peck, 75c; peck, \$1.40.

Early Kidney Six Weeks.

Vines large, vigorous, branching, productive, with large leaves and lilac blossoms; pods long, straight, narrow, handsome, and when young, of good quality; beans long, kidney-shaped, yellowish-drab, with darker marks about the eye. PRICE: Packet. 5c; pint, 15c; quart, 25c; 4 quarts, 75c; bushel, \$4.00.



STRINGLESS GREEN POD.

Burpee's Stringless Green Pod Bush.

The only stringless green pod bush bean in cultivation. Consequently it surpasses all others in crisp, tender flavor. The finely shaped, long green pods are absolutely stringless, and are ready to market two weeks earlier than the "Valentine." It is of immense value, not only to the market gardener, but also to the amateur who seeks a rare quality early for the home table. PRICE: Packet, 5c; 1-2 pint, 15c; quart, 50c; by express. 1-2 peck, \$1.00; peck, \$1.75.

BEANS.—Continued.

Best of All.

Originated in Germany. Pods long, very tender, succulent, stringless, of rich flavor, and an enormous producer. Very popular, especially in the south, Excellent for winter shell beans. PRICE: Packet, 5c; pint, 25c; quart, 40c.

Shell or "Navy Beans." Prolific Tree.

Enormously productive; will yield fifty bushels of shelled beans per acre. The dry beans have the appearance of the common white "Navy." The plant forms a strong, upright tree, about twenty inches high, bearing the pods well up so that they do not touch the ground. PRICE: Packet. 5c; pint, 10c; quart. 20c; gallon. 75c; bushel. \$4.50.

Lima Wax.

A great bean—Dwarf. Produces tremendous quantities of broad, thick, meaty, wax pods of light color. Seed white of Lima flavor. PRICE: Packet, Sc; pint. 25c; quart, 40c; by express, peck, \$1.70, bushel, \$5.50.

White Dutch Case Knife.

Yields an immense crop of handsome flat white beans of excellent flavor. Cooks easily. PRICE: Packet. 5c; 1-2 pint. 15c; quart. 50c. By express. 1-2 peck, \$1.00; peck, \$1.75.

Red, Speckled, Cut Short, or Corn Hill

An old variety, very popular for planting among corn. It will give a good crop without the use of poles; vines medium, twining loosely, with dark colored, smooth leaves and white blossoms in small clusters; pods short, cylindrical and tender; beans nearly oblong, cut off diagonally at the ends; white, covered at one end and slightly over the whole surface with reddish-brown dots. PRICE: Packet, 10c; pint, 25c; quart, 35c; 4 quarts, \$1.25; bushel, \$7.50.

Burpee's Bush Lima.

This is a bush form of the well known large white lima bean. It is very fixed in its bushy character, growing to a uniform height of about twenty inches. While not so early as "Henderson's Bush Lima," its larger size will commend it to many. The pods are the exact size of the large "Pole Limas" and contain as many beans of the same delicious quality.

PRICE: Packet. 5c; 1-2 pint, 20c; pint, 30c; quart, 50c; by express, peck, \$1.70.

QUALITY IS OUR MOTTO. WE WILL A BS OL UTELY HANDLE NOTH-ING BUT THE BEST.



BURPEE'S BUSH LIMA.

BEANS.—Continued.



Lazywife.

This variety originated in Bucks County, Pennsylvania, where for a number of years it has been the most popular Pole Bean grown. Pods are wonderfully broad and fleshy, and above all stringless. In many respects they surpass anything we know of. Then, again, the pods retain their rich, stringless and tender qualities until they are almost ripe; so much so in fact, that we are perfectly safe in saying that they are the best of all Snap Shorts. They also surpass every variety in the way of vines clinging to the pole. Its name, we think, implies productiveness, for the vines being covered all summer with masses of beautiful pods, it is just the sort to suit lazy wives, as a mess can soon be picked for dinner. Pods which are green are rather flattish, oval shape, and then when fully grown are from six to eight inches long, exceedingly rich, buttery and fine flavored when cooked. They are hardy, easily grown, and enormously productive PRICE: Packet, 5c; 1-2 pint, 15c; quart, 50c; by express, 1-2 peck, \$1.10; peck, \$2.00.

Don't get the idea that our seeds are inferior because they are so low in price. There is no better offered by any seed house. Our prices are wholesale to the farmers. We are after 100,000 new customers this year, and will get them by dividing our profits with our customers.

Henderson's Bush Lima Beans.



Magnificent dwarf growing lima; very early, of a delicious flavor, extremely productive and should be planted in every garden in America. It's early. It's fine. It's just the thing for a family garden. It is wondrously prolific. A package or a pint will furnish sufficient for a good sized family. It is one of those beans that can't be improved upon. PRICE: Packet, 5c; pint, 25c; quart, 40c, by express, peck, \$1.00.

Famous Kentucky Wonder, or Old Homestead.

This splendid variety, introduced in 1885, has since been offered as "Seek no Further," and was introduced in 1891 as a novelty under the name of 'Old Homestead." Vine vigorous, climbing well and very productive, bearing its pods in large clusters; blossoms white; pods green, very long, often reaching nine or ten inches, nearly round when young, and very crisp, becoming very irregular and spongy as the beans ripen. Has no Equal. Dry beans long, oyal, dun-colored. An early and very prolific sort. With snowy nods, which are most excellent for snaps. It is sometimes catalogued as "Southern Prolific," but this is an error, as the latter is two weeks latter and has shorter pods. PRICE; Dostpaid, packet. 4c; 1-2 pint, 15c; pint, 25c; quart, 40c. Purchaser's expense, packet, 5c; pint, 15c; quart, 25c; peck, \$1,90.

BEETS. Culture.

The best results are obtained on a deep, sandy loam. For general crop sow as soon as the ground will permit in drills eighteen inches apart and thin out to three inches in the row. For winter use, the turnip varieties may be sown in June, and the beets may be kept by storing in a cellar and keeping covered with sand, or sandy soil, to prevent wilting, or they may be kept out doors in pits such as are used for apples and potatoes. One or two ounces, or single packets of two of three sorts, will give a good supply for a large family. It is best to sow in freshly prepared soil, which should be oressed firmly over the seed. One ounce sows fifty feet of drill—four to six pounds for one acre.

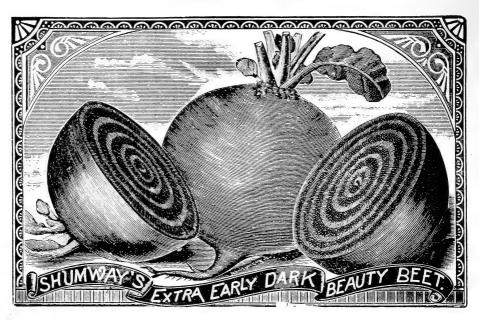
Extra Early Egyptian Blood Turnip.

The best variety for forcing, and excellent for first early crop out of doors, being very early, with small top. Leaf stems with veins dark red, leaf dark green dotted with red; roots very dark red, rounded on top but flat beneath, with very small tap roots; flesh dark red, zoned with lighter shade, hard, crisp and tender when young, but becoming woody with age. PRICE: Packet, 4e; ounce, 10e; 2 ounces, 15e; 1-4 pound, 20e; pound, 60e.

Early Eclipse.

Tops small, dark purplish, green shading to lighter color on outside of leaves. Roots nearly globular, with small tap root and very small collar. Flesh dark red, zoned with a lighter shade, very sweet, crisp and tender, especially when young. PRICE: Packet, 4c; ounce, 10c; 2 ounces, 15c; 1-4 pound, 20c; pound, 60c.

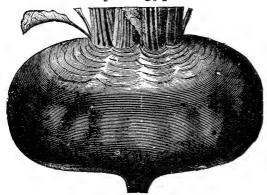
BEETS.—Continued.



Extra Early Dark Beauty.

One of the earliest ever grown. Beautiful oval shape, and the color is a rich, dark red. Flesh is fine grain and cooks tender; rich and sweet. Its flavor is superb. Is free from side roots, and smooth, and is very beautiful in market. PRICE: Packety. 4c; ounce, 10c; 1-4 pound, 18c; 1-2 pound, 30e; pound, 50c.

Crosby's Egyptian.



Crosby's Egyptian.

The name of this variety is misleading, as it resembles the Egyptian only in its extreme earliness. It is larger lighter colored and more nearly spherical; one of the best for early planting out of doors. It is a most excellent sort, becoming fit for use sooner than any other variety, but it is not as well suited for forcing in hot-beds or for transplanting as the Egyptian. PRICE: Packet, 4c; ounce, 10c; 2 ounces, 15c; 1-4 pound, 20c; pound, 60c.

Improved Blood Turnip.

Popular everywhere; roots fine, symmetrical in shape; flesh deep blood red, tender and sweet; grows to good size; fine for early use and desirable for winter. PRICE: Postpaid, Packet, 4c; ounce, 10c; ‡ pound, 15c; 1 pound, 50c.

Half Long Blood.

An excellent sort for winter use. Roots not as long as the 'Long Smootin,' but considerably thicker, always smooth and handsome. Flesh sweet, tender and of a dark red color. An excellent keeper. PRICE: Packet, 4e; ounce, 10c; 1-4 pound, 20c; pound, 65c.

SUGAR BEET SEED.

There is no crop where the quality of the seed used is of greater importance than this; inferior seed cannot, by any amount of skill in cultivation, be made to give satisfactory yield. A great deal of most patient and skillful labor has been expended in establishing and developing strains of beets, which are adapted to sugar making. It is only by the use of the best seeds that profitable sugar making is possible.

Planting and Cultivating.

The great secret of successful and economical culture of beets is thorough preparation of the soil before planting. The seed should be planted as soon as the soil can be gotten into good condition, which is not likely to be before the middle of April, but the seed should be in before the last of May. We plant in drills twenty to thirty inches apart, dropping from twelve to twenty seeds to the foot. This will require from ten to fifteen pounds of seed to the acre. It is very important that the seed be well covered with not to exceed one inch of soil pressed firmly over it. As soon as the young plants have started sufficiently to make the rows visible they should be cultivated and the field should receive constant attention so as to keep the surface soil loose and destroy the starting weeds. When the beets are about two or three inches high they should be thinned so as to stand six to eight inches apart in the row, and cultivation should be discontinued as soon as the roots have commenced to form. Often a crop is injured by late cultivation which starts the plants into fresh growth when they should be maturing and developing sugar. Sugar beets ripen and become fit for harvesting as distinctly as do potatoes or corn, and they indicate that they are approaching this condition by the outer leaves turning yellowish and the top seeming to decrease in size owing to the curling of the central leaves. They should be gathered and stored when ripe or mature, for if left they may start into fresh growth, which lessen the proportions of sugar. The successful cultivation of beets rich in sugar requires rotation of crops, however rich and good the soil may appear to be.

BEETS.—Continued.

Vilmorin's Improved.

In general the most desirable beet for the sugar facory in general the most desirable beet for the sugar facory is the one containing the largest percentage of sugar. In this variety we have one of the richest sorts in cultivation, and moreover it will do better on new lands than any other variety, suffer less from an excess of nitrogen, and will keep vanety, suner less from an excess of nitrogen, and will keep the best. In size it is medium or a little below, yielding from ten to sixteen tons per acre, and containing under favorable conditions, as high as eighteen per cent of sugar. The beet grows below the surface. The green leaves are smooth-edged and spreading. PRICE: Packet, 4c; ounce, 10c; 1-4 pound, 15c; pound, 35c.

French Very Rich.

A variety with large, long roots yielding from fourteen to twenty tons per acre, and often containing as much as eighteen per cent of sugar. The roots are below the surface. The green leaves are upright in growth. The hardiest and earliest grown. PRICE: Packet, 4c; ounce, 10c; 1-4 pound, 15c; pound, 35c.

Klein Wanzleben.

A little farger than Vilmorin's Improved and containing about the same amount of sugar. Its yield of beets is from twelve to eighteen tons per acre. The beet grows below the surface. The green leaves are rather large and spreading with wavy edges. A little hardier and easer rown than Vilmorin's Improved. Probably the best sort for the experimenter to use. PRICE: Packet, 4e; ounce, 10c; 14 pound, 15c; pound, 35c.

We will supply 5 pounds or more of Klein Wanzleben, Vilmorin's Improved and French Very Rich Sugar Beets at 25 cents per pound, by express or freight, at purchaser's expense.

BEETS FOR STOCK FEED.





Mangel Wurzels.

Mangel wurzels.

An ever increasing acreage is being planted to stock beets, because of the wonderful results by feeding them as shown by the reports of our experiment stations, and leading farmers and stockmen. Fattening, breeding and milk cattle do equally well on them. With diary cattle the flow of the milk is largely increased. About one-fourth of the dairy ration should be of roots. Hog cholera s prevented by their use. Sow in rows two and one-half to three feet apart as soon as the ground can be thoroughly worked. Cover seed. Thin to eight inches apart, when four inches high. Where many are grown a good drill and cultivator are needed. Five pounds sows an acre. Decidedly a monstrous size beet and of regular shape and quality nutritious, and valuable as a stock food; blood-red color; very smooth and decidedly improved strain of Mangles. Plant from first of April, up to improved strain of Mangles. Plant from first of April up to last of June. A good root-crop is essential from which to realize a good profit. PRICE: Packet, 4c; 1-4 pound, 10c; 1-2 pound, 15c; pound, 25c; 5 pounds, \$1.00.

Imperial Sugar.

This is a larger, coarser beet than the "French White Sugar." It is more like "Mangel Wurzel" in character, but the white flesh is much sweeter and tenderer. It is some-times used for the table. PRICE; Packet, 4c; ounce, 10c; 1-4 pound, 15c; pound, 35c.

Golden Tankard.

Best for dairy farming. Considered indispensable among English dairy farmers; it is stated by them they are able to obtain a higher price for milk when feeding cows on "Golden Tankard". Sheep thrive on it. Other mangels cut white, circled with yellow, but "Golden Tankard" is of a rich, deep yellow throughout. Early, hardy, and a heavy cropper, for on account of its shape the roots can be left standing close in rows. PRICE: Perpacket 4c; ounce. 10c; 1-4 pound, 15c; pound; 35c; by express. not prepaid, 5 pounds \$1.50.

French Yellow Sugar.

Grows to a large size; roots half long, yellow and sweet. Excellent for stock feeding. PRICE: packet, 4c; ounce, 10c; † pound, 15c; pound, 40c.

CABBAGE.

One ounce of seed will produce about 3,000 plants 8,000 to 10,000 plants to the acre of the early sorts and 9,000 of the large, late kinds.

We pride ourselves on having the best, purest and highest grade of cabbage seed that is offered, or at least it is surpassed by none. Compared with the cost of seed. there is more money in growing cabbage than in any other crop and there is nothing that growers should be more

The cabbage requires a deep, rich soil and thorough working to insure good solid, full-sized heads. Sow early sorts in hot beds in February or March, or in open ground as soon as it can be worked. Later or winter crops in May or June, in shallow drills six inches apart. plants are four inches high transplant into richly manured ground, the early kinds two feet apart, the fall and winter varieties three feet apart. Packets contain about 800 seed. Slug Shot and tobacco dust are used to kill insects and worms.

Culture.

The requisites of complete success are: First, good seed; this plant is largely dependent upon the best seed for its success; no satisfactory results can possibly be obtained from poor stock. Second, rich, well prepared ground. Third, frequent and thorough cultivation. A heavy, moist and rich loam is most suitable. It should be highly manured and worked deep.

Henderson's Early Summer.

Ten or twelve days later than the Jersey Wakefield, but much larger in size and will stand on the ground much longer without bursting open. PRICE, packet, 4c; ounce, 20c; † pound, 60c; pound, \$2.00.

Early Flat Dutch.

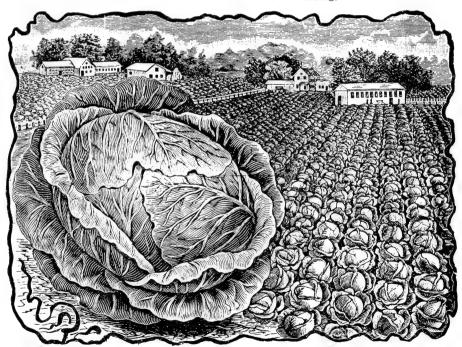
This well known and popular variety is considered by many to be the best second early sort; large, flat, solid heads, of excellent quality. Does not burst easily. PRICE, packet. 4c; ounce, 15c; † pound, 40c; pound, \$1.50.

Ratekins' Ideal Cabbage.

Ratekins' Ideal Cabbage.

As now improved, the most profitable cabbage ever offered to the American cabbage grower. Absolutely sure heading. 999 out of 1,000 plants make perfect, salable heads averaging 16 to 20 pounds; interior is creamy white, compact and crisp, unequaled for cooking or slieing; flavor especially fine. It is, without exception, the best winter keeper in the world. It will flourish on all soils, in fact, it will prove a gold mine to all cabbage growers. Over twenty thousand pleased customers pronounce this the most wonderful of all late cabbage. The illustration of our field of "Ratekins' Ideal" will give you only a faint idea of the profits derived from the King of all cabbages. We don't ask you \$4 or \$5 a pound, although well worth \$10. compared with the strains sold by other seedsmen at \$2 to \$3 a pound. We want every one of our customers to give it a trial this season; the seed from these we offer you cannot be equaled. PRICE: packet, 10c; ounce, 25c; \$1 pound, 80c; \$2 pound, \$1.50; pound, \$2.75, postpaid. We regret for lack of space we cannot say more about this wonderful cabbage.

this wonderful cabbage.



Ratekins' Ideal Cabbage.

Early Winnigstadt.

One of the best for general use, being very hardy and sure to head forming a hard head when most sorts fail. Those who have failed with other kinds can hope to succeed with this. It seems to suffer less from the cabbage worm than any other sort. Plant very compact, with short, thick leaves. Heads regular, conical, very hard and keep well both summer and winter. It is the hardiest, not only as regards frost, but will suffer less from excessive wet, drought, insects or disease, than any other second early sort, and will give a fair crop of heads when others fail. PRICE, packet, 4c; ounce, 20c; 2 ounces, 35c; 2 pound, 60c; pound, \$2.00.

All Seasons.

This is generally grown on Long Island for the New This is generally grown on Long Island for the New York market. Heads very large, round, often nearly spherical, but usually somewhat flattened; very solid and of the best quality, keeping as well as the winter sorts. Plants very vigorous and sure heading; leaves large, smooth, with dense bloom. Remarkable for its ability to stand the hot sun and dry weather. Our trial has shown that heads which were fit for market by July 10th were still salable September 10th, the only change being increased size and density. One of the very best sorts for general cultivation. PRICE, packet, 4c; ounce, 25c; 2 ounces, 40c; 4 pound, 75c; pound, \$2.50.

Early Jersey Wakefields.

The earliest and hardest head-The earliest and hardest heading of extra early cabbages. Our seed is new and good. Heads conical, compact, solid and of excellent quality. The thick, stout leaves and compact habit make it the best for wintering over and very early setting. PRICE, packet, 4c; ounce, 35c; 2 ounces, 60c; 1 pound, \$1.00; pound, \$3.00.

Early York.

Heads small, heart shaped, firm and tender; of very erect and dwarf habit, so that they may be grown fifteen or eighteen inches apart. PRICE, packet, 4c; ounce, 20c; 2 ounces, 35c; 4 pound, 60c; pound, \$2.00.

Holland Cabbage.

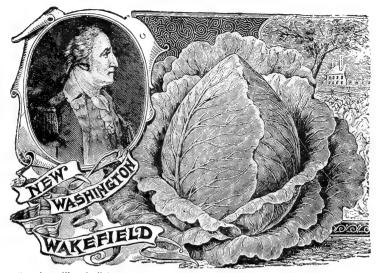
(The genuine stock.)

(The genuine stock.)

In some important particulars this is the most remarkable cabbage yet produced. In fact, it well illustrates the truth that "merit will win" in that while it was introduced only about three years ago, it has already become the favorite sort with those who have the true stock. The heads, which are very solid and deep, are of medium size, averaging about eight pounds in weight. In color they are very distinct; in point of quality they have no superior and they keep better than any other sort, the heads being as solid and perfect when taken up in the spring as when put away in the fall. At that time no cabbage will sell beside them even at one-half the price. PRICE, postpaid, packet, 4c; ounce, 20c; pound, 70c; pound, \$2.00.

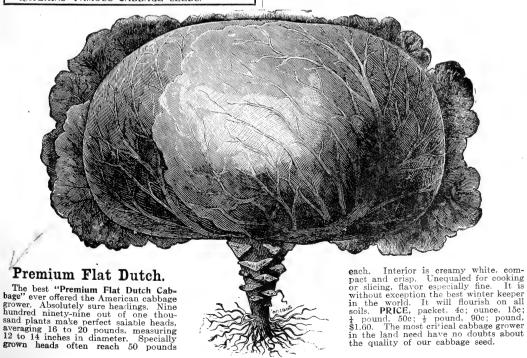
IF YOU WISH TO HAVE A GOOD SUPPLY OF SAUER KRAUT NEXT WINTER, PLANT RATEKINS' FAMOUS CABBAGE SEEDS

CABBAGE.—Continued.



Ratekins' Autumn King.

"Autumn King" is an entirely distinct variety; best keeper we have ever seen; it produces enormous solid heads of that dark shade of green that is most desirable in a cabbage, and has such small outer leaves that it can be planted closer together than the ordinary late sorts, and can be relied on to produce a greater weight of crop per acre than any other variety. A distinct feature of the "Autumn King" is the peculiarly crimped leaves, which not only adds to its appearance, but enables it to be distinguished anywhere. It is unquestionably one of the best late sorts of today. PRICE, packet, 4c; ounce, 20c; ½ pound, 70c; pound, \$2.00.



CABBAGE.—Continued.

Surehead.

A popular sort for main crop; never fails to form uniformly large solid heads, which are tender and of fine sweet flavor. An excellent keeper and a good shipper. PRICE, packet, 4c; ounce, 20c; 1 pound, 50c; pound, \$1.50.

RED CABBAGE.

Early Dutch Dark Red.

Largely used for pickling. Early, hardy and a good keeper. PRICE, packet, 4c; ounce, 20c; ½ pound, 60c; pound, \$1.75.

Ratekins' Mammoth Rock Red.

The best variety of late red cabbage. It is sure heading, of large size and deep red color. Those who like a red cabbage will be pleased with this one. PRICE, packet, 4e; ounce, 20c; ‡ pound, 60c; pound, \$2.00.

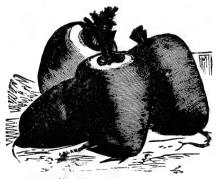
CARROTS.

The carrot is one of the most wholesome and nutritious of our garden roots and deserves to be more extensively used, both for culinary and stock feeding purposes. We urge our readers to give some of the early table sorts a trial. For feeding stock, especially horses and milch cows, the carrot cannot be surpassed; and it should be more largely grown by farmers for this purpose.

Culture.

While a sandy loam made rich by manuring the previous year is the best soil for the carrot, any good land if thoroughly and deeply worked will produce satisfactory crops. When it is possible to do so, it is advisable to sow as early in the spring as the ground is fit to work, though good crops may, in this latitude, be grown from sowing as late as June 15, but success from such late planting is uncertain. For table use sow the smaller kinds as early as practicable in rows 16 to 18 inches apart. For field culture prepare the ground thoroughly and sow in drills 18 to 24 inches apart, using from one and one-half to three pounds to the acre, according to the distance between the rows. Cover one-half to one inch deep and see to it that the soil is pressed firmly above the seed. As soon as the plants appear, use the cutivator or wheel hole. Do not let the weeds get a start. Thin the smaller table sorts to 8 to 10 to a foot, and the field varieties to 3 to 6 inches apart in the row. For winter use gather and store like beets or turnips.

Oxheart.



The Oxheart.

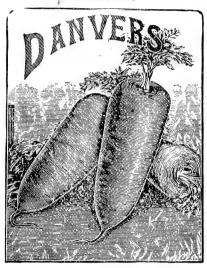
We do not hesitate to call this the most valuable variety in existence. It is intermediate between the Half-Long and Horn varieties, attaining a diameter of 3 to 4. inches at the neck, of beautiful shape and rich orange color Where other varieties require digging it is easily pulled. It will produce roots as early as any variety and continues of the best quality all the season. It is excellent for hogs

and other live stock and has yielded 1,200 bushels per acre. Cut off tops with seythe and pull roots with potato hooks. PRICE, packet, 5c; ounce, 10c; ‡ pound, 25c; pound, 70c.

Early Scarlet Horn.

One of the most popular varieties grown, color deep orange; one of the best for table use. PRICE, packet, 5; ounce, 10c; 2 ounces, 15c; \(\frac{1}{4}\) pound, 20c; pound, 60c.

Danvers.



Is in form about midway between the Long Orange and Shorthorn class, growing generally with a stump root. It is of a rich, dark orange color, grows to a large size, is smooth, and the flesh very close in texture with little core. It is a first-class carrot for all soils. PRICE, packet, 4c; ounce, 10c; ‡ pound, 20c; pound, 65c.

Early Market.



Stump rooted, grows about the size of our Cincinnati Market Raddish, excellent forcer; fine flavor; flesh deep orange, fine grained. PRICE, packet, 4c; ounce, 10c; ‡ pound, 25c; pound, 85c.

CARROTS.—Continued.

For Stock Feeding.

This is one of the most profitable crops for winter feeding that can be grown. The yield is enormous, especially on deep sandy soil, and the roots are greedily eaten by all kinds of stock. Horses are especially fond of them and in Europe they are largely grown as a feed for horses. Besides being a valuable feed, they act as a tonic, keeping the animal in good condition with sleek coats.

The roots are easily kept over winter by storing them in pits or cellars.

Danver's Half Long.

As described before, is also an excellent feeding sort.

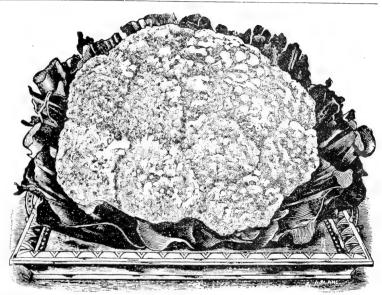
Long White Belgian Carrot.

Roots of mammoth size. Grows one-third above ground. Color above ground green, and beneath ground pure white. This variety is largely grown for stock feeding. We have grown of this variety on a piece of drained swamp land at the rate of a thousand bushels per acre. Probably no other green root crop will produce more feed, unless it be the New Mastodon Carrot. PRICE, packet, 4c; ounce, 8c; 4 pound, 15c; pound, 45c.

CAULIFLOWER.

Early Snowball.

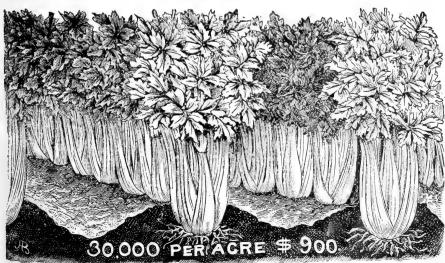
Admirably adapted for forcing or wintering over for early crop and the most popular sort for these purposes. It is also one of the best sorts for late summer and fall crop and with reasonably favorable conditions every plant will form a large solid head of fine quality. The plants are compact with few narrow, upright leaves and are well suited for close planting. The heads are solid, compact, round, very white and curd like and are developed earlier than those of any other sort. We know our stock of this variety is unsurpassed and is superior to much that is sold under such names as "GiltEdge." "Earliest." etc. PRICE, packet, 15c; 1 ounce, 75c; ounce, \$2.50.



HENDERSON'S EARLY SNOWBALL CAULIFLOWER.

CELERY.

One Ounce Will Produce About 6,000 Plants



This we consider one of the luxuries of the garden. For first crop sow seed early in hot beds, or in boxes in the house, in rich, moist soil, covering the seed very lightly. For main crop sow seed in open ground in April or as soon as the soil is in good condition. Seed germin-Seed germin-ates slowly and if weather is hot and dry protect with light covering of hay or straw. Stir soil as soon plants are well up; thin out and transplant so that they stand about an inch apart in the row. If they grow too rapidly shear the

CELERY.—Continued.

tops off when about four or five inches high and this will make them more stocky. For main crop set plants out between June 15th and July 15th in rows three feet apart and the plants six inches apart in the row. Care should be excerised to firm the earth well around plants when setting and they will root better Keep clear of weeds until about the middle of August, when it will be time to begin earthing up. Draw the soil up against the plants with a hoe as closely as possible, firming it enough to keep plants in an upright position. Late in the season the blanching process must be finished by digging the soil from between the rows and banking it clear to the tops on each side of the row of celery. Much labor is saved by growing of celery. Much labor is saved by growing the self-bleaching varieties, but they do not keep as well for winter use.

Golden Self-Blanching.

This is by far the most popular variety now on the market. It is of medium earliness, of dwarf, compact habit, with thick, solid, heavily ribbed stalks, which blanch easily to a clear waxen yellow. When grown in rich, moist soil, the stalks are numerous and large with a soild heart of beautiful yellow. The best grade seed is scarce this year. PRICE, packet. 4e; ounce, 30c; ½ pound, 90c; pound, \$3.00.

Henderson's Half Dwarf.

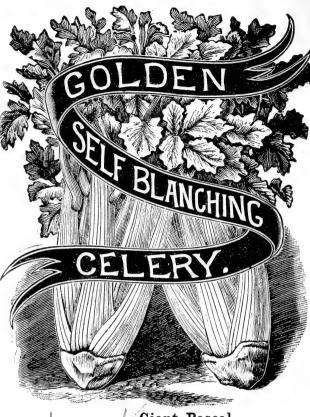
Entirely solid, possessing a rich nutty flavor, while it has much vigor of growth and heavy bunch. PRICE, packet, 5c; ounce, 15c; † pound, 45c; pound, \$1.50.

White Plumb.

Stalks, portions of the inner leaves, and heart, haurally white and become fit for use by simply tying up closely with soft twine. More used than any other variety by market gardeners. Our seed is of the highest quality and sure to please all. PRICE, packet, 5c; ounce, 15c; 1/pound, 45c; pound, \$1.50.

Golden Dwarf.

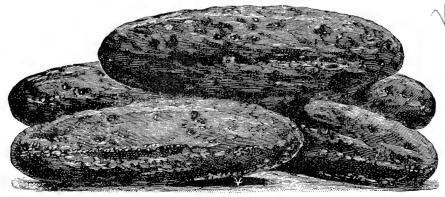
Waxy golden yellow, cylindrical, solid, crisp. PR packet, 5c; ounce, 15c; ‡ pound, 40c; pound, \$1.25.



Giant Pascal.

Stalks remarkably large, thick, solid, entirely stringless, very crisp and brittle. A vigorous grower and is self-blanching, clear white. PRICE, packet, 5c; ounce, 20c; 2 pound, 60c; pound, \$1.75.

CUCUMBERS.



Improved White Spine.

Cucumbers succeed best in a rich, loamy soil. For first early, sow in hot beds, in berry boxes, or in small flower pots, six weeks before they can be set out in the open ground. When danger of frost is over transplant in hills four feet apart each way. For general crop plant

in open ground in May, about twelve seeds in a hill. When danger of bugs is past thin to four strong plants in a hill, For pickling, plant in June. Sprinkle the vines with plaster or air-slacked lime to protect from bugs, or use Slug Shot to kill the bugs.

Improved White Spine.

One of the best sorts for table use. Vines vigorous, fruiting early and abundantly; fruit uniformly straight and handsome, dark green, with a few white spines; flesh tender and of excellent flavor. In this country this variety is used more, perhaps, than any other for forcunder glass. PRICE, packet, 4c; ounce, 10c; ½ lb., 50c; pound, \$1.50.

CUCUMBERS.—Continued.

One Ounce Will Plant Fifty Hills; Two Ounces Will Plant One Acre.



Improved Chicago Pickle.

Improved Chicago Pickle.

This variety which originated with a leading pickle grower near Chicago, is considered the best variety there as it is very prolific, matures early and produces an im mense number of desirable shaped pickles. PRICE, packet 4e; ounce, 20c, pound, 60e; pound, \$2.00.

Improved Long Green.

A standard sort. Vine vigorous and productive. form ing fruit fit for the table nearly as early as the shoter sorts; fruit about four inches long, firm and crisp. The young fruit makes one of the best of pickles, and when ripe is the best of any for sweet pickles. PRICE, packet, 4c: ounce, 10c; † pound, 65c; pound, \$2.00.

Early Cluster.

Vine vigorous, producing the bulk of the crop near the root and in clusters. Fruit short, with uniformly thick end, dark green, but paler at blossom end. A very productive sort. PRICE, packet. 4c; ounce, 10c; 2 ounces, 15c; † pound, 40c; pound, \$1.50.

Early Frame.

An old and popular variety, of medium size, straight and handsome; excellent for pickles when young. PRICE, postpaid, packet, 3c; ounce, 10c; ‡ pound, 40c; pound, \$1.45. Purchasers' expense, packet, 4c; ounce, 10c; ‡ pound, 40c; pound, \$1.50.

Boston or Jersey Pickle.

Is used almost exclusively by the market gardeners near Boston for pickling. PRICE, packet, 5c; ounce, 20c; pound, 50c; pound, \$1.60.

Buying Vegetable Seeds by Mail.

It is the easiest, most pleasant and profitable way to secure the best seeds if you select a reliable firm. If your merchant handles bulk seeds he must have a large profit and often holds over quite a bit. Commission seeds and boxes left at stores are a snare and a delusion and the chances are that you get stuff so old that it will prove worse than useless and you throw away your time and money in planting them. If you once try the mail order buving seeds, you will certainly be pleased and ready each season to send us an order for your full supply of seeds. As for farm seeds there is no doubt you can do much better than to buy of your merchant, as you are enabled to buy of us wholesale and get what it is impossible for many merchants to handle. Something rare and profitable to you. Let us prove it to you.



Fordhook Pickling.

A very small, oval prickly variety, quite distinct from all others. It is grown exclusively for pickles; is the smallest of all varieties, and should always be picked when young and tender. The seed is slow to germinate, requiring usually from two to three weeks. PRICE, packet, 4c; ounce, 20c; ‡ pound, 75c; pound, \$2.50.

Many Shortages in Garden Seeds.

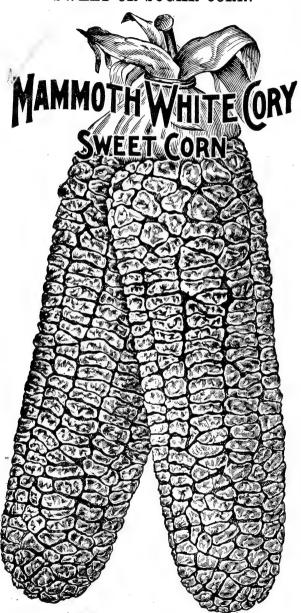
The season just closed has been a very disastrous one to seed crops of all kinds and in all sections of the country, as well as abroad. Excessive and continued wet, cold weather and the ravages of insects have damaged crops to such an extent as to amount to practically a total failure in many instances. When it is considered that last year, with a continued drouth, was almost equally destructive to crops, so that no stocks are carried over, it becomes readily apparent that the shortage is a serious one and high prices will prevail. In fact the question of prices is not the most important one—it is a question of being able to obtain the stock of some items at any price.

We mention the following as being especially short and on which higher prices than in former years will be noted: Beans, Sweet Corn, Cucumber, Musk Melon, Watermelon, Peas, Pumpkin, Squash, Tomato, Many sorts also of Cabbage, Beet, Onion,

Radish and Turnip.

CORN.

SWEET OR SUGAR CORN.



Mammoth White Cory.

The largest and best extra early sweet corn. The talks are no larger than those of the "White Cob Cory," but each stalk furnishes two or more large, fine shaped ears which are fit for use before those of any other sort. The ears are twelve-rowed, very symmetrical and handsome, with no opening between the rows at the base. The grain is large, broad, very white and of remarkable good quality for such an early sort. The beauty and quality of this variety give it ready sale even when the market is over-stocked, PRICE, packet, 10c; ½ pint, 15c; quart, 30c; 4 quarts, \$1.00.



SWEET OR SUGAR CORN.—Cont.

Early White Cory.

The plants are usually about four feet high and bear two or even three ears which are eight-rowed with large, somewhat coarse but very sweet and tender grain. PRICE, packet, 10c; pint, 15c; quart, 30c; 4 quarts, \$1.00.

Early Minnesota.

A standard early variety that has held a high place in the list of sweet corns ever since its introduction. The ears are of good size, well flavored and of the best cooking qualities. Valuable for either private or market use. PRICE, packet, 5c; i pint, 15c; quart, 35c. By express, i peck, 60c; peck, 1.00.

Crosby's Early.

For medium early use and general crop this is one of the most desirable varieties. Ears are of medium size and the cooking qualities excellent. A good cropper and profitable for family use and as a market sort. PRICE, packet, 5c; ‡ pint, 10c; quart, 35c. By express, ½ peck, 60c; peck. \$1.00.

Country Gentleman.

Certainly a fine sort; ears average nine or ten inches in length, but what it lacks in size is more than equaled in superior quality and productiveness. It sometimes yields as many as five or six ears to the stalk. Deep grained and exceedingly sweet and juicy. One of the best for the family garden. PRICE, packet. 5c; pint, 15c; quart, 20c; gallon, 75c; bushel. \$4.00.

POP CORN.





MONARCH WHITE RICE.

White Rice.

A very handsome and prolific variety; ears short; kernels long, pointed, and resemble rice; color white. Probably no variety of pop corn is superior to this for parching. We supply lots of four quarts and less, shelled. PRICE, packet, 5c; pint, 25c; quart, 30c; peck, purchaser's expense, 85c.

If corn is wanted by mail or express prepaid, add 10 cents per pint, 15 cents per quart for charges.

Queen's Golden.

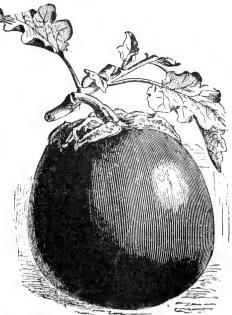
Color a peculiar lustrous golden yellow; pops to a rich cream color; very prolific. PRICE, packet, 5c; pint, 25c; quart, 35c; peck, purchaser's expense, 85c.

New Red Beauty.

A valuable new rice pop corn, introduced by an extensive pop corn grower in Illinois. Ears medium to large; color bright red; deep grains and small cob; extremely early and productive. Highly recommended. PRICE, packet, 5c; ½ pint, 15c; pint, 25c; quart, 35c.

DON'T FORGET TO INCLUDE A FEW POUNDS OF OUR POP CORN IN YOUR ORDER.

EGG PLANT.



Early Round Purple.

A tender plant, which should be started quite early in a hotbed or box in the house which must be kept warm. Transplant late to open ground two and a half feet apart.

Early Round Purple.

The earliest variety in existence, being several weeks earlier than most others. Fruit is exactly the same shape and color as the "Improved New York Purple." but is somewhat smaller. It is fully equal in quality, and what it lacks in size is made up in productiveness. PRICE, packet, 4c; ounce, 35c; 4 pound, \$1.10.

Improved New York.

Our strain of this, the leading market variety, we believe to be unsurpassed. Very large size, skin deep purple, flesh white and of excellent quality. Very productive. PRICE, packet, 4c; ounce, 40c; I pound, \$1.25.

KALE.

"Borecole Kale and German Greens" are general terms applied to those classes of cabbages that do not form heads, but are used in their open growth. Some of the varieties are the most tender and delicate of any of the cabbage tribe. They are hardy and are not injured by the frost.



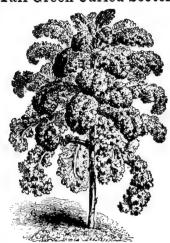
Dwarf Green Curled Kale.

KALE.—Continued.

Dwarf Green Curled Scotch.

Plant low and compact, but with large leaves curled, cut and crimped until the whole plant resembles a bunch of moss. It would be well worthy of cultivation simply for its beauty. One of the best sorts for use, and when well grown and cooked is one of the most palatable of vegetables. PRICE, packet. 4c; ounce. 10c; † pound. 20c; pound. 70c.

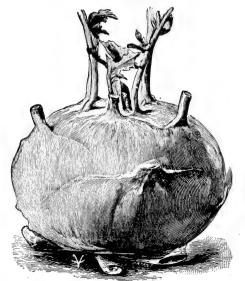
Tall Green Curled Scotch.



TALL GREEN CURLED SCOTCH KALE.

This is very hardy and is not injured by a moderate frost. About thirty inches tall, with an abundance of dark green leaves, which are densely curled and cut, forming a very beautiful plant. It stands the winters in the middle states without any protection. PRICE, packet, 4c; ounce, 10c; ‡ pound, 25c; pound, 70c.

KOHL RABI.



SHORT-LEAVED EARLY ERFURT KOHLRABI

Culture.

Sow in light, rich soil, as early as possible, in dril s sixteen inches apart, and when established, thin to six

inches apart in the row. One or two plantings at intervals of ten days will give a succession until hot weather, when they fail to grow well, but plantings may be made the latter part of July for fall use.

Early Purple Vienna.

Nearly like the last except in color: This is a bright purple. The leaf stems are tinged with purple. PRICE, packet, 4c; ounce, 30c; 2 ounces, 55c; 1 pound, \$1.00; pound, \$2.75.

LEEK.

Belongs to the onion family and by some preferred to that vegetable. Sow the seed and care for young plants same as for onions, but they need a little more room in order to develop more fully. When the young plants are double the size of a goose quill, transplant to a prepared bed in rows one foot apart and four or five inches in the row.



London Flag Leek.

London Flag.

This variety is more cultivated in this country than any other. It is hardy and of good quality. PRICE, packet, 4c; ounce, 10c; ‡ pound, 30c; pound, \$1.00.

LETTUCE.

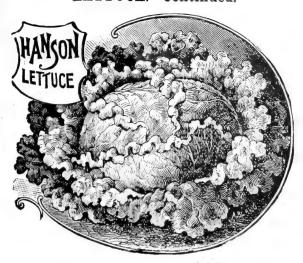
One Ounce Will Sow 120 Feet of Drill.

Probably no vegetable is more universally used than Lettuce, and to be thoroughly appreciated it must be brought to the table fresh and unwilted. The quality of lettuce depends largely upon a rapid and vigorous growth. Sow in hotbed in March and in open ground as early as it can be worked, thinly in drills one foot apart. For a succession sow every three weeks during the season. The soil should be rich and mellow. Thin out plants as they grow.

Early Prize Head.

It forms a mammoth head, and remains tender and crisp throughout the season; is prompt to head but slow to seed, of superior flavor and very hard. Leaves of dark, reddish brown color variegated with dark green. It is an immensely popular variety. PRICE, packet, 4c; ounce, 10c; ½ pound, 25c; pound, 75c.

LETTUCE.—Continued.



Improved Hanson.

For general use for market and gardeners we are sure that no variety can surpass our "Improved Hanson" Lettuce. Deliciously sweet, crisp and tender, and almost absolutely free from any rank or bitter taste. Resists the summer heat extremely well. It cannot be too highly praised. PRICE, packet, 4c; ounce, 10c; ‡ pound, 25c.

California Cream Butter.

A variety of Cabbage Lettuce, with round solid heads. Outside of heads are of a medium green, slightly marked with small brown spots; within, the leaves are of a very rich, cream yellow color, most refreshing in appearance, and particularly rich and buttery to the taste. The heads are of a very good size, compact, very hard and solid. It is medium early and one of the very best summer varieties of head lettuce we have ever seen. PRICE, packet, 4c; ounce, 10c; ‡ pound, 25c; pound, 75c.

Brown Dutch.

(Seed Black.) An old sort noted for its hardiness. Leaves large, thick, green, tinged with brown. It always forms a large, solid head which is somewhat coarse looking, but the inner leaves are beautifully blanched, exceedingly sweet, tender and well flavored. Desirable because of its hardiness and fine quality. PRICE, packet, 4c; ounce, 10c; † pound, 25c; pound, 80c.

Salamander.

(Seed Black.) A very bright green and attractive variety. It forms large, solid heads, composed of thick, smooth, very tender leaves, the inner ones finely blanched and all of finest quality. It remains a long time in head before running to seed. PRICE, packet, 4c; ounce, 10c; † pound, 25c; pound, 80c.

It Pays to Buy Reliable Seeds.

above all else. They cannot be bought at half price. Good seed lay the foundation for a good and perfect crop, and they cannot be produced or sold at half price. Cheap seeds are dear at any price, even as a git. If you are acquainted with the cost of production and the market value of high grade seeds, an examination of this book will show that seeds of equal quality cannot be had anywhere at lower prices. In our extensive business it is our constant aim to please and satisfy every customer, and no one can do it with cheap and inferior seeds.

Early Curled Simpson.

An improved variety of the Curled Simpson, with large, loose heads and excellent flavor. PRICE, packet, 4c; ounce, 10c; ‡ pound, 25c; pound, 75c.

Selesia.

An excellent spring, summer and fall variety forming good sized heads that stand drouth and heat longer without injury than any other sort; matures very early. PRICE, packet, 4c; ounce, 10c; ½ pound, 25c; pound, 75c.

Grand Rapids.

A forcing variety of superior quality and beautiful appearance, strong grower, free from rot, and keeps crisp and tender without wilting when exposed for sale, longer than any other forcing lettuce. It is also a desirable variety for sowing in open ground. PRICE: Packet 4c, ounce 15c, 1-4 pound 40c, 1 pound \$1.20.

Black Seeded Simpson.

It is much lighter colored than preceding; it grows nearly double in size, of fine quality. One of the best for forcing or outdoor planting. PRICE, packet, 4c; ounce, 10c; ‡ pound. 25c; pound. 75c.

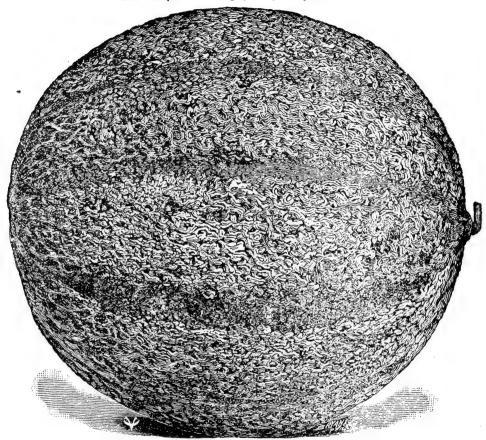


Black Seeded Simpson.

MELONS.

MUSK MELONS.

One ounce will plant about eighty hills; two pounds to the acre.



Rocky Ford.

The soil best adapted to the culture of Melons is a warm, rich, sandy loam. Plant in hills five or six feet apart each way, ten or twelve seeds in a hill. When they begin to vine thin out, leaving only four of the most thrifty. As Melons are very sensitive to the cold, they should not be planted until the settled warm weather begins—in this latitude about the middle of May. Cultivation should begin as soon as the plants appear above the ground, and be kept up once a week until the vines interfere too much. You will be pleased with our Melon Seed.

The Rocky Ford Musk Melon.

The Melon known on the ''bills of fare'' of the leading hotels and restaurants of America as the "Rocky Ford Canteloupe" takes its name from the little town of Rocky Ford. Colorado, which has become famous for its Melons as is Baltimore for its oysters. The shipping of these Melons has reached such proportions as to cause it to become the leading industry of the town, thousands of crates being annually forwarded to the principal cittes of the United States. The reason for the widespread popularity of this Melon is two-fold. First, its superb table qualities, being firm, sweet, and remarkably solid. Second, its wonderful shipping qualities which enable it to be carried great distances and yet arrive in first-class condition for market. The fruit is of medium size and oval-shaped, heavily netted and very solid. The flesh is green, thick and juicy. It is

very early and wonderfully productive. It is acknowledged by many market gardeners as the best and most profitable Musk Melon that grows. PRICE: Postpaid, packet 4c, ounce 10c, 1-4 pound 30c, pound \$1.00. Purchaser's expense, packet 4c, ounce 8c, 1-4 pound 25c, pound 90c.

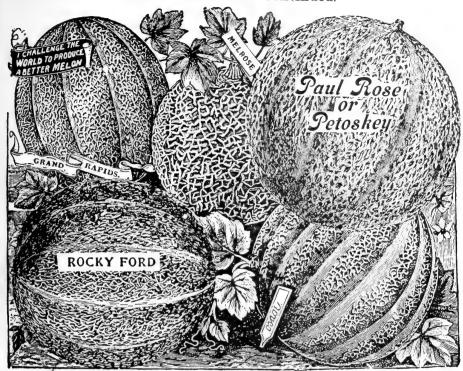
Extra Early Hackensack.

We offer under this name a very distinct stock, different and much superior to that often sold as Extra Early Hackensack. The fruit is medium sized, nearly round with deep ribs and very coarse netting. The flesh is green, a little coarse, but very juicy and sweet. PRICE: Packet 4c, ounce 10c, 1-4 pound 30c, pound 90c.

Small Green Nutmeg.

Fruit of medium size, slighty ribbed, globular. Skin dark green, becoming yellow when over ripe, and nearly covered with broad, shallow netting. Flesh thick, a little coarse, but of fine flavor. This variety is in universal demand for both home and market use. It is the size best suited for hotel and restaurant use. Our stock is carefully grown and selected and will be found first-class in every particular. PRICE: Postpaid, packet, 4e. ounce 10c. 1-4 pound 30c, pound \$1.00. Purchaser's expense, packet 4e, ounce Sc, 1-4 pound 25c, pound 90c.

MUSK MELONS.—Continued.



Emerald Gem.

This is .. e of the most delicious little Melons that we have ever eaten. The flesh is thick, of a suffused salmon color, almost red, and ripens thoroughly to the extremely thin, green rind. It is peculiarly crystaline in appearance, juicy and rich. The flavor is sweet and lucious beyond description. Rather small for marketing but very nice for home use. PRICE: Packet 4c, ounce 10c, 1-4 pound 30c, pound 90c.

Osage Melon, or Miller's Cream.

One of the best Melons on the market for family use and also greatly liked by gardeners. The skin is thin, of dark green color and slightly netted. The flesh is salmon color, remarkably sweet and spicy in flavor, extremely thick and delicious to the rind. The seed cavity is very small. It is seldom that one of poor quality is found. The whole crop is very even and extra heavy, owing to the thickness of the meat. All lovers of fine Melons should try the Osage. PRICE: Packet 4c, ounce 10c, 1-4 pound 30c, pound 90c.

Paul Rose.

We have been greatly pleased with this new variety, and we consider it one of the finest sorts. It is the result of a cross of the Osage and Netted Gem, and it combines the sweetness and high flavor of the former with the fine netting and superior shipping qualities of the Netted Gem. It is peculiarly sweet, rich, delicious flavor and a long keeper. It was a cargedoner plantit and cough two of market If you are a gardener plant it and catch top of market prices. PRICE: Packet 4c, ounce 10c, 1-4 pound 30c, pound \$1.00.

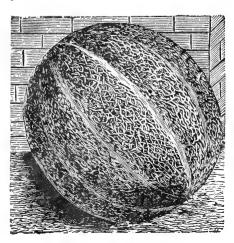
Improved Cantaloup.

A finely improved variety, often weighing from fifteen to twenty pounds. The flesh is thick, light in color and of fine quality. Quite early and a splendid keeper. Include this variety in your order. PRICE: Packet 4c, ounce 10c, 1-4 pound 30c, pound 90c.

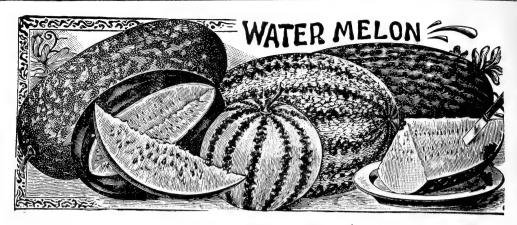
RATEKIN'S RELIABLE MELON SEEDS PLEASE EVERYBODY. THEY GROW.

Ratekins' Early Market.

Many years were spent in perfecting this decidedly distinct and beautiful Melon. A most valuable characteristic is its close, strong netting. Its vigorous growth gives it great hardiness and ability to withstand drouth, blight and bugs. Its beautiful shape and handsome appearance are remarked upon when placed side by side on the market bench or counter with any of the popular sorts of the day. It ripens only a few days after the Early Hackensack, is most prolific, more uniform, bears longer, and the fruit s more solid; seldom bursts at blossom end; flavor and quality are all that can be desired. It is green fleshed, with a small seed cavity. A valuable sort for a general crop. PRICE: Packet 10c, ounce 20c, 1-4 pound 35c. pound \$1.00.



Ratekins' Early Market.



WATERMELONS.

One ounce is required for forty hills; three will plant an acre.

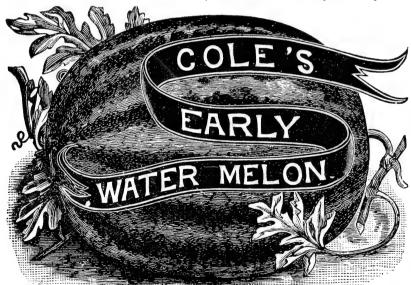
A light sandy soil, with good exposure to the sun, is the best for Watermelons. It should be prepared deep, but receive shallow cultivation. Hoe often and thoroughly. Plant in hills eight or ten feet apart each way. Plant eight to ten seeds in a hill, and finally, when danger from insects is past, leave but three strong plants. Thousands of melon growers annually depend on us for their seeds and are universally pleased, claiming that nowhere have they ever obtained seed so pure and reliable. It pays to have the best. Packets contain about 100 seeds

Mountain Sweet.

The old standard. Best quality. PRICE: Packet 4c, ounce 8c, 1-4 pound 25c, pound 75c.

Phinney's Early.

Early, medium size, and quite productive. PRICE: Packet 4c, ounce 8c, 1-4 pound 25c, pound 75c.



Cole's Early.

Decidedly the finest early variety for the private garden but is too brittle for long shipments. It is very early and will mature further north than most other sorts. Of medium size, very productive, continuing to bear throughout the season. Flesh of bright red color, of granulated, sparkling appearance. In flavor it is luciously sweet and refreshing. PRICE: Packet 4c, cunce 10c, 1-4 pound 25c, pound 75c.

Sweet Heart Melon.

This Melon is early, large, handsome, heavy, and productive. Shape is oval; color, mottled light to very dark green. Flesh bright red, solid, tender, and very sweet. PRICE: Packet 4e, ounce 8c, 1-4 pound 25c, pound 75c.

Cuban Queen.

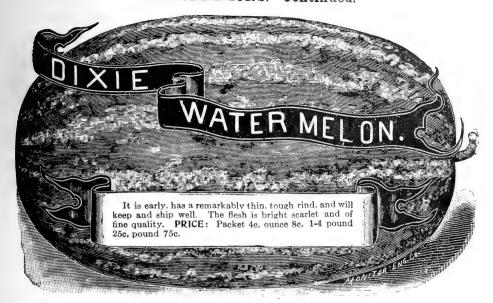
This is a large variety, often weighing eighty pounds and upwards; striped light and dark green; an enormous cropper. PRICE: Packet 4c, ounce 8c, 1-4 pound 25c, pound 75c.

Black Diamond.

One of the largest and best shippers yet produced. A quick seller, and fine for home market and family gardens. It has a beautiful red core, and sweet and delicious. PRICE: Packet 4c, ounce 8c, 1-4 pound 25c, pound 75c

WATERMELON SEED IS SCARCE THIS YEAR, AND PRICES A SHADE HIGHER.

WATERMELONS,—Continued.



Ratekins' Champion.

A cross between Kolb's Gem and Hoosier King. All that could be said of Kolb's Gem as to good shipping qualities can be truthfully stated in a higher degree of Ratekin's Champion. All the praise of high quality bestowed on the Sweet Heart can be repeated of dur new melon, but its prominent point of merit is its extreme size—no Melon ever yet produced anything like so uniformly large fruit nor approaching it in productiveness. Melons weighing from seventy-five to ninety pounds are frequent. It is the most prolife Watermelon ever grown. Its color is a rich, dark green, almost black. Of uniform, symmetrical shape, roundish to bluntly oval, and this similarity of shape running through the whole field. PRICE: Postpaid, packet 10e, ounce 10e, 1-4 pound 35e, pound \$1.10.

Peerless or Ice Cream.

The great home market Melon. This old stand-by is our best general cropper for the home market; has too thin a rind for shipping unless packed in straw. We have sold it for many years to our most extensive Nishna Valley growers, for whom it brings the highest prices, and meets with the ready sale regardless of other varieties that may be on the market, because it has become a great favorite with market gardeners and melon dealers and consumers. Few, if any, surpass a True Ice Cream for quality and productiveness. Medium early, fruit oblong, large size; rind light mottled green; flesh bright scarlet, solid to the center, melting and delicious. PRICE: Packet 4c, ounce 8c, 1-4 pound 25c, pound 75c, 3 pounds \$2.00.

Kleckley's Sweet.

Large oblong melon. The skin is dark green, flesh bright scarlet, the rind only about one-half inch in thickness. The scarlet flesh is sweet and sugary and is of such texture that it leaves no strings of pulp whatever in eating. The melon is better for home use than for shipping and we believe it is the Best Table Melon Today. PRICF: Packet, 4c; ounce, 10c; 1-4 pound, 25c; pound, 75c; 5 pounds, by express, \$2.50.

Triumph.

A southern variety which has become very popular with shippers. The fruit is uniformly large, nearly round, dark green, indistinctly striped with a lighter shade; rind thin and firm, making it an excellent shipper; flesh bright red and of good quality. PRICE: Packet, 4c; ounce, 10c; 14 pound, 20c; pound, 60c.

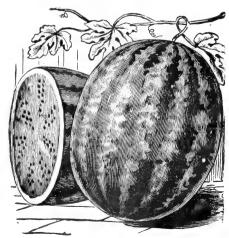
McIver Wonderful Sugar.

A large, oblong melon of handsome appearance; skin shows broad bands of white, with narrower ones of green. Its soft pink flesh is crisp, juicy, very sweet and solid to the center. PRICE: Packet, 4c; ounce, 10c; 1-4 pound, 25c; pound, 75c.

Citron.

For preserving; grows uniformly round and smooth, striped and marbled with light green; flesh white and solid. **PRICE**: Packet, 5c; ounce, 10c; 1-4 pound, 25c; pound, 90c

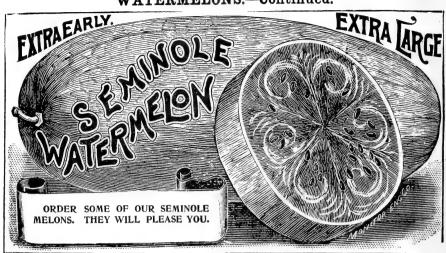
Kolb's Gem.



Kolb's Gem.

This variety, on account of its excellent shipping qualities, is extensively grown for that purpose. Grow nearly round, and the color is a dark green with lighter narrow stripes. Very thin and tough rind. Flesh bright red and of good flavor. Our seed is choice. PRICE: Packet, 4c; ounce, 8c; 1-4 pound, 20c; pound, 65c.

WATERMELONS.—Continued.



Seminole Watermelon.

Very large, exceedingly productive, of the finest quality and the beautiful red core makes it attractive. Sweet and very delicious. Beautiful shape for market. PRICE: Packet 4c, ounce 8c, 1-4 pound 20c, pound 60c, 3 pounds for \$1.65.

Monte Cristo.

In our trial grounds this has proven to be a northern strain of Kleckley's Sweets," and is certainly a very sweet and delicious melon. It is very large, dark green color outside, and has beautiful red core, and is never stringy. It is a grand variety for both market and the family garden. PRICE: Postpaid, packet, 4c; ounce, 8c; 1-4 pound, 25c; pound, 75c. Purchaser's Expense, packet, 4c; ounce, 7c; 1-4 pound, 20c; pound, 65c.

Mixed Watermelons.

Twenty-five varieties of the finest watermelons, the largest, earliest, sweetest, grown separately and seed carefully mixed by us. PRICE: Postpaid, packet, 4c; ounce, 10c; 1-4 pound, 25c; pound, 75c. Purchaser's Expense, packet, 4c; ounce, 7c; 1-4 pound, 20c; pound, 65c.

Dark Icing or Green Mountain.

Fruit round and of medium size; rind dark green, thin. but very strong; flesh deep scalret; rich, juicy and delicious. PRICE: Postpaid, packet, 4c; ounce, 8c; 1-4 pound, 25c; 1 pound 75c. Purchaser's Expense, packet, 4c; ounce, 7c; 1-4 pound, 20c; 1 pound, 65c.

Light Icing.

Similar to the preceding, but light variety. PRICE: Postpaid, packet, 4c; ounce, 8c; 1-4 pound, 25c; 1 pound, 75c. Purchaser's Expense, packet, 4c; ounce, 7c; 1-4 pound, 20c; pound, 65c.

Apple Pie.

Grows uniformly round and smooth, striped and marbled with light green. Flesh white and solid, seeds red. It should be borne in mind that this variety is not for eating in the raw state, but for preserves, pickles, etc. PRICE: Packet, 5c; ounce, 10c; 2 ounces, 15c; 1-4 pound, 30c; pound. \$1.00.

Pride of Georgia.

A much better table variety than the "Kolb's Gem," though not so good a shipper, owing to the exceeding thinness and tenderness of the ring. In form the melons are an oblong oval, bearing indentations somewhat like the musk melon. The vines are exceedingly prolific. PRICE: Postpaid, packet, 4c; ounce, 8c; 1-4 pound, 25c; 1 pound, 75c, Purchaser's Expense, packet, 4c; ounce, 7c; 1-4 pound, 20c; 1 pound, 65c.

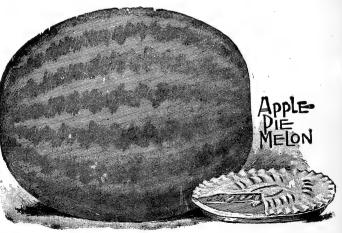
Black Boulder.

Nearly round, very large and heavy. Skin a dark black-green. Rind very thick. A good shipper. PRICE: Packet. 4c; ounce, 10c; 1-4 pound, 25c; pound, 90c. By express or freight, not prepaid, pound, 80c.

Gypsy or Georgia Rattlesnake.

A superior early market variety; large, oblong, the skin green, mottled and striped. PRICE: Packet, 4c; ounce, 10c; 1-4 pound, 25c; pound, 75c.

DON'T FAIL TO INCLUDE IN YOUR ORDER SEVERAL VARIETIES OF OUR MELON SEED. THERE'S LOTS OF MONEY IN GROWING MELONS FOR THE MARKET.





Good onion seed is of the utmost importance, as onions are one of the most important crops grown, both in market are one of the most important crops grown, both in market and family gardens and there is no other vegetables where the quality of the seed exerts a greater influence upon the crop than onions. There is more money in onions grown from seed than almost any other crop. Fully realizing this, we have for many years made a specialty of onion seed which is all grown from choice, selected bulbs, critically examined before height at the read. In vitality, it is very strong. before being set out for seed. In vitality it is very strong, being carefully tested, and we are sure that our onion seed CANNOT BE EXCELLED in purity, vitality or high quality. Large onions can easily be grown the first year from the seed by obtaining our American grown new crop onion seed. crop was good this year and prices are reasonable. In comparing our prices with others, remember that we pay the postage. Deduct 10e per pound if to be sent by express. Ask for prices in large lots. Packets contain about 1.000 seeds.

Culture.

One ounce w. I sow about 100 feet of drill; four pounds will sow one acre. The soil for onions should be a rich loam thoroughly enriched with well rotted manure and pulverized before sowing the seed. It should be as free from weeds and grass as possible. As early as the ground can be worked in the spring, sow the seed in drills fourteen inches apart, covering one-half inch. Commence hoeing as soon as the rows can be seen; skim the ground over the surface; avoid stirring deeply, and work the soil away from the bulbs. At second hoeing weed carefully and thoroughly by hand. When the tops die, pull and spread evenly over the ground; stir or turn until fully dried, then cut the tops one-half inch from the bulb. For pickles or sets, the seed should be sown very thickly, about fifty pounds to the acre for sets, and fifteen to twenty pounds for pickling.

Good Onion Seed.

Good onion seed is a blessing, but cheap onion seed is an abomination. The country is every year flooded with impure or ancient seed that is offered at a low price, but such seed is in reality a high priced, wholly unsatisfactory article. We are sure that first-class onion seed of the crop of 1902 can not be purchased at lower prices than those quoted in this catalog. and confident than no onion grower in America can really do better than to send direct to headquarters, Rate-kins' Seed House, Shenandoah, Iowa.

Cheap Onion Seed is Expensive Even as a Gift.

The country is flooded with it, but we are satisfied that good fresh seed, crop of 1903, cannot be purchased at lower prices than quoted in this book. The figures given herewith are the lowest prices we will likely be able to quote for many years to come. Bear in mind, good, sound, plump seed has always been one of our greatest specialties, and that more than 10,000 onion growers look to us annually for their supply of seed.

Vellow Globe Danvers.

A very handsome, round or globe shape variety of large size, with thin, yellow skin, white flesh, fine grained, mild, very firm and the best of keepers. It ripens early, sells readily at the highest prices in our markets. This is one of the best cropping varieties in existence, has yielded 1.000 bushels per acre. and one of our customers states that his crop averaged over 800 bushels per acre for nine years. PRICE: Packet, 4c; ounce, 10c; 1-4 pound, 30c; pound, \$1.00; 4 pounds, not prepaid, \$3.50.

ONIONS.—Continued.



White Portugal.

Very desirable for family use. Flavor mild and pleas-Very desirable for family use. Flavor mild and pleasant; skin silver-white; of handsome appearance, highly esteemed for pickling when young, also for market in the early winter. This is the variety from which white onion sets are grown. You will make no mistake by planting this excellent sort. It will please you immensely for any purpose. Buy your seeds from first hands. Selected stock seed of our own growth. PRICE: Postpaid, packet, 4c; ounce, 15c; 1-4 pound, 65c; pound, \$2.25; 4 pounds, not prepaid, \$8.00.

Large White Globe.

The handsomest market variety in existence, making beautiful, clean, pure silvery white bulbs of large, even size, globe shape, mild and pleasant flavor, and outsells every other variety. It is comparatively a good keeper and undoubtedly the best white sort. PRICE: Packet, 4c; ounce, 20c; 1-4 pound, 60c; pound, \$2.00; 4 pounds, not prepaid, \$7.50.

Red Globe.

This early strain of the well-known Southport or large "Red Globe" onion is a most valuable improvement. The handsome shape, color and keeping qualities of this onion make it one of the very best varieties, which are always in demand toward spring. PRICE: Packet. 4c; ounce. 15c; 1-4 pound, 50c; pound, \$1.60; 4 pounds, not prepaid, \$5.25.

Mammoth Silverskin.

Attractive form, flattened but thick through. Single bulbs often attain weights of from two and a half pounds to four pounds each. The skin and flesh are white, and of a particularly mild and pleasant flavor, mature early and is of uniformly large size and perfect form, and will bring a large price in market. PRICE: Packet, 4c; ounce, 10c; 1-4 pound, 75c; pound, \$2.25.

TRY AT LEAST A FEW BUSHELS OF OUR NEW SENSATION OATS.

Mammoth Prize-Taker.

This is 'he large, beautiful Spanish variety, sold in the This is 'he large, beautiful Spanish variety, sold in the fruit stores and markets of all large cities. Enormous size, fourteen to sixteen inches in circumference. Although of such great size, it is very hardy and a good winter keeper. Outside skin is rich yellow, while the flesh is white, sweet and tender. They bottom well, are free from stiff-necks, and have produced more bushels of marketable onions to the acre than any other variety in America. In market they attract attention, sell readily at advanced prices. True American Grown Seed. PRICE: Packet, 4c; ounce, 15c; 1-4 pound, 45c; pound, \$1.60.

Mammoth Silver King.

In appearance the most striking onion grown. We hardly know which to commend the most, its large size, symmetrical appearance and beautiful silvery flesh, or its sweetness, tenderness, and mild flavor. These qualities make it the best for exhibition and fancy high-priced trade. Not recommended for the extreme north. PRICE: Large packet 4c, ounce 15c, 1-4 pound 50c, pound \$1.75, postpaid.

- Australian Brown Onion.

Extra early, long keeping. The most valuable variety introduced in a generation. The Australian Brown Onion is of medium size, wonderfully hard and solid, and most attractive for market, both as to form and appearance. They are extremely early in ripening and never make stiff necks or scullions. Every seed seems to produce a good-sized Onion, and the bulb begins to form very quickly—when the plant is not over three inches high. The coming Onion. Planted at the same time as Red Wethersfield, it proved to be nearly four weeks earlier and ripened off more uniformly. From its firmness and hardness, it will keep in good condition longer than any other Onion known. The color of the skin is a clear amber-brown. So widely contrasted from any other Onion is this color that it will be noticed on market, and when once bought purchasers will most likely call again for "those beautiful brown Onions." PRICE: Postpaid, packet 4c, ounce 10c, 1-4 pound 35c, pound \$1.10, 5 pounds \$5.00.

ONIONS. - Continued.

White New Queen.

Small; noted for extreme earliness and mildness of flavor; much used for pickling. PRICE: Large packet 40, ounce 20c, 1-4 pound 50c, pound \$1.80.

Extra Early Barletta.

This is a new distinct variety; the very earliest Onion in cultivation. It is fully two weeks earlier than the Early White Queen, which heretofore has been the earliest variety on the market. They are pure paper white color, very mild and delicate in flavor, one and one-half inches in diameter, and three-fourths of an inch in thickness. For table use and pickling it is most valuable. PRICE: Packet 5c, ounce 20c, 1-4 pound 65c, pound \$2.00.

ONION SETS.

BY MAIL,	BY EXP	RESS OR	FREIGHT.
QUART.	QUART.	PECK.	BUSHEL.
Red Onion Sets 25c	15c	70c	\$2.50
White Onion Sets 30c	20c	90c	3.00
Yellow Onion Sets 20c	15c	70c	2.50

THOSE WISHING TO PURCHASE SEED FOR ONE OR MORE ACRES OF ONIONS, WRITE FOR SPECIAL PRICES.



PARSNIP.

One ounce will sow 200 feet of drill five pounds to an acre.



Sow early in spring in good rich soil, which has been plowed deep, in drills fifteen inches apart, covering half an inch. Thin to five or six inches apart in rows, They are improved by frost,

Long Sugar or Hollow Crown.

The old standard. PRICE: Packet 4c, ounce 10c 1-4 pound 20c, pound 40c.

Improved or Table Guernsey.

A greatly improved and wonderfully fine strain of the Guernsey Hollow Crown Parsnip. The roots do not grow as long as the Hollow Crown, but are of greater diameter and more easily gathered. A very heavy cropper; the roots are smooth, with a deep hollow crown and a small top. The flesh is fine grained and sweet and of excellent quality; cooks evenly all the way through to the center which is as fine, soft, and even quality as outside portions. PRICE: Packet 4c, ounce 10c, 1-4 pound 25c, pound 65c.

PARSLEY.

One ounce will sow 150 feet of drill.



Moss Curled Parsley.

Sow in March, thinly in drills one foot apart and half an inch deep. Soak seed in warm water a few hours before sowing. For winter use protect in a glass frame or light cellar. Very useful for flavoring soups and stews and for garnishing. The green leaves are used for flavoring, or they may be dried crisp, rubbed to a powder, and kept in bottles until needed.

Moss Curled.

A very select stock, most beautifully crimped and curled. PRICE: Per packet 4c, ounce 10c, 1-4 pound 25c.

Hamburg.

turnip-rooted variety, used for flavoring soups, PRICE: Per packet 4c, ounce 10c, 1-4 pound 20c, pound 65c.

PEPPERS.

One ounce will produce about 1,800 plants.



The culture of Pepper is the same as for Egg Plant; the plants need quite as much heat to perfect them, though they mature sooner and may be sown a little later. Guano, hen dung, or any other bird manure, hoed into the surface soil when the plants are about six inches high, will wonderfully increase the product and also improve the quality of the fruit.

Mammoth Ruby King.

Monstrous large, productive sort of recent introduction. Desirable for Mangoes. Bright, glossy, ruby-red color, and largest known. A great, large, mild, sweet, attractive variety, and valuable acquisition. PRICE: Packet 4e ounce 20c, 1-4 pound 60c.

Sweet Mountain.

Plants very productive, growing upright, with moderately large leaves. Fruit very large, long, often eight inches or more in length, by two in diameter, very smooth and handsome, being when unripe of a bright, deep green color, entirely free from any purple tinge, and when matured of a rich red. Flesh very thick, sweet and mild flavored. Well suited to use as a stuffed pickle.

PRICE: Packet 4c, ounce 20c, 1-4 pound 60c.

Large Bell or Bull Nose.

Our stock of this well-known variety which is some times called Sweet Mountain is a great improvement on the best stock obtainable only a few years ago. Plant vigorous, compact, very productive, ripening its crop uniformly and early. It is one of the most popular and desirable

sorts. Fruit large, cylindrical, with thick, mild flesh; quality for use in salads and pickles; color bright red when ripe. PRICE: Packet 4c. ounce 15c, 1-4 pound 50c.

Red Cayenne.

Pod small, cone-shaped, red, hot, and pungent. Used for pickles and making pepper sauce. PRICE: Packet 4c, ounce 20c, 1-4 pound 65c.

CLIPPER Seed Cleaner.

This is an up-draught fanning mill and does the best work in cleaning all kinds of seed and grain, more of these are used by seed dealers than all other makes combined, and farmers would in many cases save the price of a mill by cleaning and grading up their grain before selling.

PRICE, \$19.40.

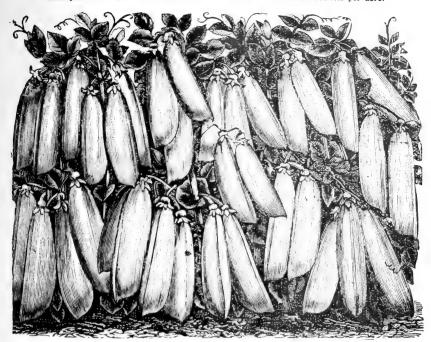
Sent Direct from the Factory.



Large Bell or Bull Nose Pepper.

PEAS.

One quart will plant about 100 feet of drill; two to three bushels per acre.



Nott's Excelsion.

Peas are extremely hardy and will endure a great deal of cold, either in or above ground. By sowing as early as the ground can be worked and making repeated plantings at intervals of two weeks, Peas of excellent quality may be had far into the summer. Sow in drills two to three inches deep, and from three to four feet apart, narrow for the dwarf and wide for the tall-growing sorts. Dwarf-growing Peas require rich soil and no support; tall-growing varieties should be trained to wire trellises or supported by brush. If the soil is rich they will run too much to stalks. Wrinkled Peas marked (*) contain a greater amount of saccharine matter than the smooth sorts.

Crop of Seed Peas was very short the past season as was the previous year, so none were held over, and prices are out of sight and higher than for the last ten years. Our crop was fair and we have a liberal supply, so are able to offer them down low and of the best quality.

Alaska.

Height two feet, pods rather small, dark green color, well filled, the earliest Pea known, being two days earlier than the Rural New Yorker, and ninety per cent of the pods can be gathered at the first picking. PRICE: Per packet 5c, 1-2 pint 15c, quart 50c; by express, 1-2 peck \$1.00, peck \$1.75.

Nott's Excelsior.

will welcome it as an ideal family and market Pea. It is fully as sweet and delicious as the American Wonder, and grows one -half taller. Pods are larger and it is far more productive than the Premium Gem, and it is within a day or two as early as the first early smooth Pea. The Peas were ready for table use within forty-three days from planting. Quality very superior. PRICE: Per packet 5c. 1-2 pint 15c, quart 55c. By express, 1-2 peck \$1.25, peck \$2.25.

Champion of England.

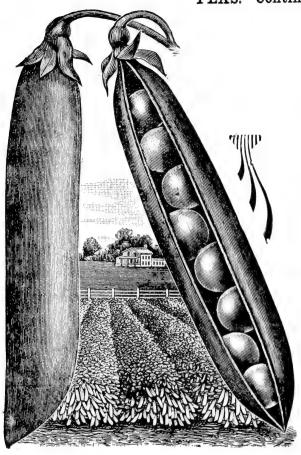
One of the richest, best flavored Peas grown. PRICE: Packet 5c, 1-2 pint 12c, quart 40c; by express, 1-2 peck 75c, peck \$1.25,

American Wonder.



The most popular extra-early variety for the family garden. Being very sweet it can not be planted quite so early as the above as it will not stand as much cold wet weather, but it is far superior to the extra-early smooth sorts in flavor and table qualities and is quite productive. Of dwarf and robust habit, growing about ten inches high, and produces a profusion of good-sized, well filled pods fairly packed with the finest flavored Peas. On good soil each vine will average twelve pods and each pod six peas. The vines grow from eight to twelve inches high. PRICE: Per packet 5c, 1-2 pint 20c, quart 60c. By express, 1-2 peck \$1.25, peck \$2.25.

PEAS.—Continued.



Improved Strategem.

VImproved Strategem.

Late variety for family or market use. Half-dwarf, Late variety for tamily or market use. Half-dwarf, vigorous, branching habit, and under favorable conditions an enormous cropper. Pods long and filled with seven to nine large peas of extra-fine quality. PRICE: Packet 5c. 1-2 pint 15c, quart 50c; by express, 1-2 peck 85c peck, \$1.50.

First and Best.

A standard first early variety popular with gardeners in all parts of the country. This variety is perhaps more largely grown by market gardeners for first early than any other. Crop is very short this year. PRICE: Per packet 5c, 1-2 pint 12c, quart 40c; by express, 1-2 peck 90c, peck \$1.65.

*Everbearing.

Height two feet; late to very late; hardy, vigorous, enormous cropper, pods and peas of large size and good quality. PRICE: Packet 5c. 1-2 pint 15c, quart 45c, by express, 1-2 peck 85c, peck \$1.50.

McLean's Little Gem.

An early dwarf, green, wrinkled variety, growing about fifteen inches high. When green it is very large, sweet, and of delicious flavor. PRICE: Packet 4c, pint 30c, quart 50c.

Iowa Challenge.



Iowa Challenge Pea.

An extra-early variety of superior merit which is a favorite with Shenandoah market-gardeners. is a favorite with Shenandoah market-gardeners. We can, in confidence say that after a trial of nearly all extra-early varieties offered to the trade we have not found one possessing more merit—hence its name. For the market-gardener it has no superior. It is not only extremly early and prolific, but it is of good flavor. All the good qualities of the Extra Early are most nearly brought to perfection in the Challenge. Vines eighteen inches. PRICE: Per packet 5c, 1-2 pint 12c, quart 40c; by express, 1-2 veck 90c, peck \$1.50.

*Bliss' Everbearing.

Height two feet, late to very late, hardy, enormous cropper, pods and peas of large size and good quality. PRICE: Postpaid, packet, 4c; 1-2 pint, 12c; 1 pint, 20c; 1 quart, 35c. Purchasers' expense, packet, 4c; 1-2 pint, 8c; pint, 12c; quart, 20c; peck, \$1.50.

Yorkshire Hero.

(Big Gem.) Height one and one-half feet. Seeds large, yellowish green, wrinkled. Quality fine. PRICE: Large packet, 5c; quart, 40c, postpaid. By express or freight, quart, 25c; 1-4 bushel, \$1.25; bushel, \$5.25.

Tom Thumb.

This variety was introduced thirty years ago. Vine bushy, growing to a height of ten inches; foliage heavy; productive, matures in thirty-five days after sprouting. PRICE: Packet, 5c; 1-2 pint, 15c; quart, 40c.

Marrowfat.

Is grown largely by gardeners and also sown as a field pea for stock. PRICE: Per packet, 5c; 1-2 pint, 10c; quart, 35c. By express, 1-2 peck, 60c; peck, \$1.00.

Field Peas.

See list of Miscellaneous Field Seeds.

PRICES AS GIVEN ARE POSTPAID. IF ORDERED BY FREIGHT OR EXPRESS AT SENDER'S EXPENSE. DEDUCT 7c PER PINT, 15c PER QUART FROM PRICES GIVEN.

PEAS.—Continued.

Improved Ground Pea or Peanut.



The peanut plant is a pea, which blossoms in the air and then thrusts the ovary underground for development. The ripened ovary or seed pod is the Peanut of commerce. The choice variety which we offer is early, large, and prolific, yielding fewer imperiet pods than any other kind, and producing 100 bushels per acre on medium land. The nut is red with two or three kernels to the pod; large and of rich flavor. Vines average three and one-half to four feet across, making valuable fodder for stock. A paying crop in the south, not demanding rich soil. PRICE: Postpaid, packet 10c, pint 25c, quart 40c; purchasers' expense, packet 10c, pint 20c, quart 35c.

PUMPKINS.

One ounce will plant twenty-five hills; four pounds will plant one acre.

Pumpkins are not so particular in regard to soil as melons or cucumbers, but in other respects are cultivated the same, though on a larger scale. They are generally raised between hills of corn, but may be planted with success in fields by themselves.

Pumpkins are sold in the markets in large quantities every fall and are considered a very profitable crop. They are also valuable for feeding to stock.

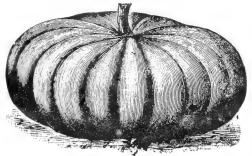
Include a few pounds in your order. Planted with corn, two pounds will plant one acre.

Sweet or Sugar.



Fruit small and round. A very prolific variety and superior for pies and table use. The skin is deep orange yellow, an excellent keeper. PRICE: Per packet, 4c; ounce, 10e; 1-4 pound, 20e; pound, 60c.

Large Cheese-Kentucky Field.



Large Cheese Pumpkin.

Large, round, flattened fruits with creamy buff skin. It is an excellent keeping variety, with thick flesh of exceptionally fine quality. Commonly called sweet pumpkin throughout the west. PRICE: Packet, 4c; ounce, 10c; 1-4 pound, 20c; pound, 50c.

Connecticut Field.

The common field or cow pumpkin. If you have any live stock to feed it will pay you to put in a few acres of these. PRICE: Per ounce, 5c; 1-4 pound, 10c; pound, by mail, 35c. By express or freight, 10 pounds, \$1.75; bushel of twenty-five pounds, \$3.00.

Mammoth Tours.

Also called "Mammoth Whale." Originated near Tours, France, where it is largely grown, both for feeding cattle and table use. Grows to an immense size, sometimes three feet in length, and to a weight of 100 to 200 pounds. Flesh of a salmon color. Seed of a peculiar shape. PRICE: Packet, 4c; ounce, 15c; 1-4 pound, 40c; pound, \$1.25.

Yankee Pie.

This is the noted New England Pie or Small Sugar Pumpkin. Same shape and color as the "Connecticut Field," but smaller, very sweet, fine grained and one of the best varieties for table use. We have sold this to thousands of customers in all parts of the country and it pleases everyone for making pies. Early and very productive. PRICE: Packet, 4c; ounce, 10c; 1-4 pound, 20c; pound, 60c.

WE WANT EVERY ONE OF OUR FARMER FRIENDS, AND THAT MEANS ALL WHO RECEIVE THIS BOOK, TO PLANT SOME OF OUR PUMPKINS THIS YEAR.



RADISHES.



One ounce for 100 feet of drill; eight to ten pounds for an acre.

All varieties thrive best in light, sandy loam. For vary use sow in hot bed in February, giving plenty of ventilation, or outside in drills as soon as the soil can be gotten in order, covering the seed about half an inch deep. Sow every two weeks from March to September for a succession. They must All varieties thrive best in light, sandy loam. For early grow rapidly to be crisp, mild and tender.

Early Scarlet Turnip.

One of the handsomest of the turnip radishes and a great favorite in many large markets, for early planting outdoors. ... It is but little later than the "White Tipped, Forcing" and will give entire satisfaction where extreme earliness is and whi give entire satisfaction where externe earliness is not the primary object. Roots slightly flattened on the under side; color very deep scarlet with a white tip; flesh white and of the best quality. PRICE: Packet, 4c; 1-4 pound, 15c; pound, 50c.

Early Long Scarlet Short Top.

An old standard variety of quick growth, with long, slender roots. Radishes are ready for market about twenty-five or thirty days after planting seed; flesh crisp and mild. PRICE: Per packet, 4c; ounce, 10c; 1-4 pound, 20c; pound, 50c.

Early Frame.

Smaller and about ten days earlier than "Long Scarlet," which it very much resembles. PRICE: Packet, 4e; ounce, 10c; 1-4 pound, 20c; pound, 50c.

French Breakfast.

A small handsome variety of very quick growth; one-half inch in diameter and two inches long. Color bright carmine with clear white in lower portion. PRICE: Per packet, 4c; ounce, 10c; 1-4 pound, 20c; pound, 60c.

Rosy Gem.

An improvement on the "Scarlet Turnip, White Tip."
Their shape is perfectly globular, with rich, deep scarlet top, blending into pure white at the bottom, exceedingly tender, crisp, delicious, equally desirable for either the market or home garden. PRICE: Packet, 4c; ounce, 10c; 1-4 pound, 20c; pound, 60c.

White Strasburg.

Of handsome, oblong, tapering shape, both skin and flesh are pure white. The flesh is firm, brittle and tender, and possesses most desirable character of retaining crispness even when old and large. Excellent for summer use, and mithstands severe heat and grows very quickly. PRICE: packet, 4c; ounce, 10c; 1-4 pound, 20c; pound, 60c.

Scarlet Turnip, White Top.

Handsome bright scarlet, white tip. Many gardeners make sowings of it every two weeks during summer; its fine appearance attracts customers; quality always pleases. PRICE: Packet, 4c; ounce, 10c; 1-4 pound, 20c; pound, 60c.

√ White Lady Finger.

An improvement on "White Naples," or "Vienna." Large, white, crisp variety, about as long as "Long Scarlet," and similar in shape. A very desirable sort. PRICE: Packet, 4c; ounce, 10c; 1-4 pound, 20c; pound, 60c.

Improved Chartier.



Improved Chartier.

Is decidedly distinct in appearance from any radish in cultivation. Its form is well defined by our engraving, the color at the top being crimson running into pink about the middle, and from thence downward is a pure, waxy white. PRICE: Packet, 4c; ounce, 10c; 1-4 pound, 20c; pound,

RADISHES.—Continued.

WINTER RADISHES.

Black Spanish.

A late and hardy variety of large size. Skin a very brown or black. Keeps well during the winter. PRICE: dark brown or black. Keeps well during the winter. Facket, 4c; ounce, 10c; 1-4 pound, 15c; pound, 50c.

Rose China Winter.

Of excellent quality, and a good keeper. Skin a bright rose color flesh very crisp and brittle. PRICE: Packet, 4c; ounce, 10c; 1-4 pound, 15c; pound, 55c.

Non Plus Ultra.

An improvement on the 'Deep Scarlet Turnip." Remarkably fine in quality, of very quick growth, and ready to pull within twenty days after sowing. Perfectly globular little roots of very bright color and excellent shape; certain to insure ready sale on the market. It is one of the best strains of early radishes for forcing. Beds are planted, the crop matured and sold and the bed made ready for a second planting all in thirty days. PRICE: Packet, 4c; ounce, 10c; 1-4 pound, 25c; pound, 90c.

Icicle.

A new early white radish. This magnificent novelty received its name from the almost transparent whiteness of the root. Although a long radish of good size, it vies in earliness with the first foreing sorts. It will produce a radish three and one-half to four inches long in twenty-two

days from sowing the seed. The leaves are short admitting of close planting in the hot-beds. The flesh is very white, crisp, and brittle as glass, and of fine mild flavor. PRICE: Packet, 5c; ounce, 15c; 1-4 pound, 25c; pound, 90c.

Ratekins' Radish Mixture.

A superb mixture of all kinds of radishes, early, medium, fall, winter, Chinese, etc. Sow a row of it and it will furnish you delicious radishes throughout the year. The furnish you delicious radishes throughout the year. Ine early and medium ones, as they mature and are pulled, make room for the larger growth of the fall and winter varieties. This mixture is made up of twenty-five best varieties, and with it it is necessary to make but one sowing for the entire year. You will be surprised and delighted with our popular radish mixture. PRICE: Packet, 5c; ounce, 10c; 1-4 pound, 30c; pound, \$1.00.

Long White.

A late and hardy variety of large size. Skin a very dark brown or black. Keeps well during the winter. PRICE: Packet, 4c; ounce, 10c; 1-4 pound, 20c; pound, 70c.

RADISHES.

OUR LIST CONTAINS ALL THE VERY BEST RAD-ISHES IN CULTIVATION, AND PRICES ARE BY MAIL, POSTPAID. ALL OF OUR RADISH SEED IS THE BEST FRENCH GROWN AND CAN BE RELIED UPON AS BEING THE BEST IN THE MARKET.

SALSIFY—VEGETABLE OYSTER.

One ounce will sow about fifty feet of drill center,

Why don't you grow Salsify? We are certain that if you grow it one year you will never be without it. Salsify is one of the most delicious and nutritious of vegetables and should be more generally cultivated for use in winter when the supply of really good vegetables is so limited. The soup and salad made therefrom have a delicious oyster flavor. Treat as carrots; grow rapidly. No vegetable excels this for soups, that is, if you are fond of the oyster flavor, and makes a delicious and inexpensive substitute for them in soup. Cultivate like parsnips.

Mammoth Sandwich Island.

Averages fully double the size of the old "Long White." The roots, notwithstanding their enormous size, are of superior quality. PRICE: Postpaid, packet, 4c; ounce, 10c; ior quality. PRICE: Postpaid 1-4 pound, 30c; 1-2 pound, 90c.

SPINACH.

One ounce will sow about eighty feet of drill; ten pounds to the acre.

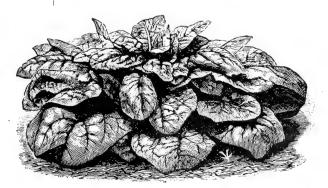
The finest "greens" of any plant in cultivation. For summer, sow early in spring in deep, rich soil, in drills one foot apart; cover one inch. Sow at intervals of two weeks throughout the season. For very early spring use, sow the winter varieties first of September, protect by covering Why PRICE: Packets contain about 800 seeds. express, five pounds, \$1.25.

Long Standing.

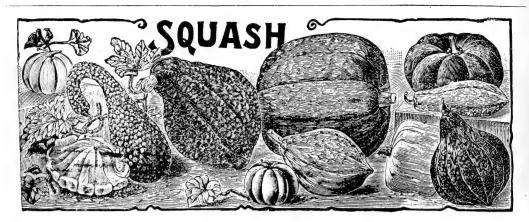
An improved, round seeded strain of excellent merit. An improved, round seeded strain of excellent meric, having all the good qualities of other sorts and continuing in condition for use much longer. The leaves are smooth and very dark, rich green. Very popular with market gardeners. PRICE: Postpaid, packet, 4c; ounce, 10c; 1-4 pound, 15c; 1-2 pound, 25c: pound, 40c.



Mammoth Sandwich Island.



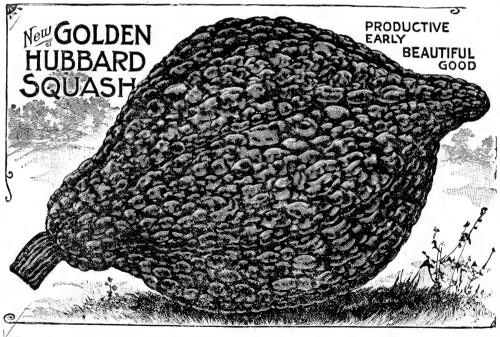
Long Standing Spinach.



The Squash is one of the most nutritious and valuable of all our garden vegetables. Few farmers appreciate the value of Winter Squash as food for stock. We think an acre of Squash, costing no more to cultivate, and much less to secure, will give as much food available for feeding stock as an acre of corn, and we strongly urge our readers to try a "patch" for this purpose.

Early Bush Crookneck.

Splendid summer sort, early, productive, very fine quality. With all the new varieties recently brought out many claim that there is no summer Squash superior to this. PRICE: Packet 4c, ounce 10c, 1-4 nound 20, pound 65c.



New Golden Hubbard Squash.

Productive, Early, Beautiful, Good.

This is a True Hubbard Squash, except in color, which is bright golden.—The vine is a vigorous but not rampant grower and wonderfully productive, expending the energy derived from liberal fertilizing in the production of an increased number rather than of overgrown and coarse fruits, as some varieties are apt to do. It ripens its crop very early and uniformly, thus making it a certain cropper. The fruits are very uniform in size, weighing from six to eight pounds, and in shape are like the Hubbard. Though maturing early, they are wonderfully long keepers, so they can be held over in good condition for spring use. The shell is warty, hard and strong, and a very beautiful orange red color, except for a bit of olive green on the blossom end. The flesh is a deep orange and uniformly so to the rind, never having the green tinge so objectionable in other sorts. It cooks very dry, fine grained and good flavored. We

believe this is the best fall and winter sort yet introduced, and that it deserves to and will become a most popular variety. It certainly has no superior as a table Squash. Send to RATEKINS for the best seed. PRICE: Packet 5c, ounce 8c, 1-4 pound 25c, pound 75c.

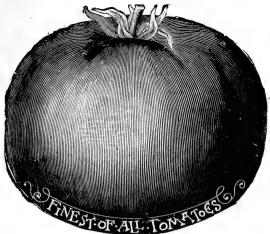
Blue Hubbard or Marblehead.

VA splendid winter variety. Shell very hard, light blue color, flesh similar to the Hubbard in quality. PRICE: Per Packet 4c, ounce 10c, 1-4 pound 20c, pound 65c.

White Bush Scalloped.

Similar to the Golden Bush. Color creamy white; an excellent variety for the family garden for early use. PRICE: Per packet 4c, ounce 10c, 1-4 pound 20c, pound 65c.

RELIABLE SQUASH SEED IS SCARCE. PLACE YOUR ORDER EARLY.



Ratekins' Earliest Tomato.

TOMATOES.

One ounce for 1.500 plants.

Tomatoes do best in a light, warm, not over rich soil, sowing it into hot beds during March. When the plants are about two inches high, transplant in boxes three inches deep, and four or five inches apart. Set out of doors as soon as danger from severe frost is over. The fruit will come easier if the vines are tied to a trellis.

"Ratekins' Earliest Tomato.

Unquestionably the earliest of all. If you sow "Ratekins' Earliest," you will have, with favorable weather, fine Tomatoes in ninety days from sowing the seed. It is an excellent shipper, being exempt from rot or cracking, ripens all over at once, and is a wonderfully smooth Tomato—none smoother. PRICE: Packet 10c, ounce 25c, 1-4 pound 75c, pound \$2.50.

Favorite.

Medium-size fruit of rich, dark red color. PRICE: Packet 4c, ounce 15c, 1-4 pound 50c, pound \$1.65.

Acme.

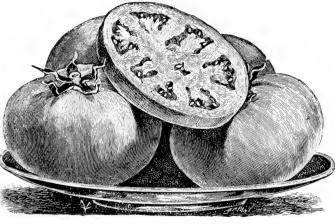
A popular early variety, with smooth, round, purple fruits of medium size. Ripens a large number early in the season; fruits are rather soft and liable to crack. PRICE: Per packet 4c, ounce 20c, 1-4 pound 60c, pound \$1.75.

Our Tomato Customers

Will please bear in mind that all our Tomatoes are grown for seed only, and used for no other purpose. The seed we offer has all been obtained from the best specimens, selected with great care, and is superior to much offered at low prices that has been secured at canneries, etc.

Extra Early Advance.

Unquestionably the earliest of all. If you sow "Advance" you will have, with favorable weather, fine tomatoes in ninety days from sowing the seed. It is an excellent shipper, being exempt from rot or cracking, ripens all over at once, and is a wonderfully smooth Tomato, none smoother. PRICE: Packet 4c, ounce 15c, 1-4 pound 50c. pound \$1.65.



Early Advance Tomato.

Improved Trophy.

First of modern improved kinds. Our "Improved Trophy" is a sort whose large vigorous and productive, large, solid, smooth, fine-flavored, beautiful fruit will satisfy the most exacting. Much liked for canning as well as fresh. PRICE: Packet 4c, ounce 20c, 1-4 pound 65c, pound \$2.00.

Ponderosa.

This is the largest-fruited Tomato and of fine quality for slicing. Vines are of strong, rather open growth; fruit oblong in form, deep through, and generally ribbed; deep purple in color. Solidly fleshy with small seed cells; of sweet flavor. In good soil fruits frequently attain a weight of one pound and over; late to ripen. PRICE: Packet 4c, ounce 40c. 1-4/pound \$1.25, pound \$4.00.

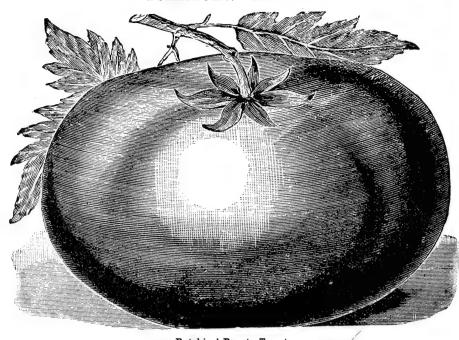
Dwarf Champion.

Its habits of growth is peculiar, for not only is it dwarf and compact, but the stem being thick, stiff and short-jointed, it is almost self-supporting when laden with fruit. In productiveness it is unsurpassed. It is also very early. The fruit is of a purplish pink color, always smooth and symmetrical, and the flesh solid and of fine quality. Can almost be called a tree Tomato. The best variety to grow for plants for sale as they are so stocky. Seed is very scarce this year. PRICE: Per packet 4c, ounce 25c, 1-4 pound 75c, pound \$2.50.



Dwarf Champion Tomato.

TOMATOES.—Continued.



Ratekins' Beauty Tomato.

Ratekins' Beauty Tomato.

Its size, beauty, shape, color, flavor, durability and productiveness make it desirable to all classes of Tomato growers. Glossy crimson with slight tinge of purple. PRICE: Packet 4c, ounce 20c, 1-4 pound 65c, pound \$2.25.

Perfection.

Solid flesh, always smooth and of blood-red color. This is a general favorite, equally desirable for the home garden, for shipping, and for canning. PRICE: Packet 4c, ounce 15c, 1-4 pound 50c, pound \$1.75.

Stone.

This is the heaviest and most solid fruited of the large Tomatoes of good quality. Our stock is distinctly superior to most of that offered under this name, being more uniform, better colored and larger. Vines vigorous and productive. Fruit round, apple-shaped, very large, very deep red in color and astonishingly heavy. PRICE: Packet 4c, ounce 20c, 1-4 pound 65c, pound \$2.25.

Matchless.

Well worthy of its name, far in beauty of color and symmetry of form it is indeed without a peer. The vines are of strong, vigorous growth, well set with fruit; are entirely free from core, of the finest flavor, of a very rich cardinal red color, and not liable to crack from wet weather; of largest size, and the size of the fruit is maintained throughout the season. Solid, a fine quality, and keeps well. PRICE: Packet 4c, ounce 25c, 1-4 pound 75c, pound \$2i50.

TOMATOES.—Continued.

Mixed Tomatoes.

For the advantage of some of our customers who would like to try all kinds, we have prepared this mixture of the varieties named and several others, which we think will please all. PRICE: Packet 5c, ounce 30c, 1-4 pound 85c.

Golden Queen.

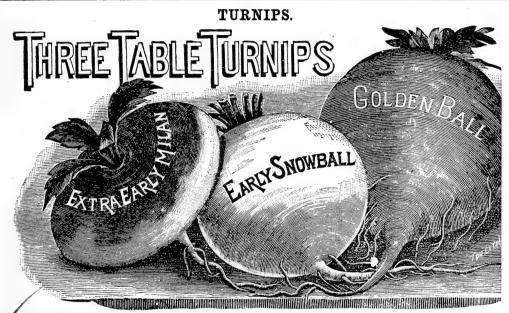
The superior flavor of the yellow varieties is bringing them into favor as table fruit, and those who think of a Yellow Tomato as the rough fruit of the old yellow sorts will be surprised at this smooth, beautiful fruit, as smooth as the best of red varieties, and of a fine and distinct flavor. PRICE: Packet 4c, ounce 25c, 1-4 pound 75c, pound \$2.50

Yellow Plum or Pear.

For pickling and preserves. Fruit uniformly oval, lemon colored and smooth skinned. PRICE: Postpaid, packet 4c, ounce 25e, 1-4 pound 75c, pound \$2.25.

25-Cent Bargain Collection.

For 25 cents we will send one package each of our great Tomatoes. These varieties will prove very interesting and profitable in any garden, Value 40 cents for 25 cents.



Extra Early Purple Top Milan.

One of the earliest sorts in cultivation. The bulb it very flat, of medium size, quite smooth, with a bright purple top. PRICE: Packet 4c, ounce 10c, 1-4 pound 20c; pound 60c.

Golden Ball or Orange Jelly.

A very beautiful and bright yellow Turnip of medium size. It is hardy and one of the best of keepers. Flesh extremely firm and solid. Always brings a good price in the market. PRICE: Packet 4c, ounce 10c, 1-4 pound 20c, pound 60c.

Early Snowball.

A globe-shaped, white-skinned Turnip, which is exceedingly productive, very early and particularly adapted for family or market use. PRICE: Packet 4c, ouncelloc, 1-4 pound 20c, pound 60c.

Purple Top Strap-Leaved.

The standard for this part of the country for late planting. Round, flat, good sized, small top, good flavor. PRICE: Packet 4c, ownce 10c, 1-4 pound 20c, pound 50c; 5 pounds or more, not prepaid, 35c per pound.

Early White Flat Dutch.

An early garden variety of excellent quality. Good size and tender. 'PRICE: Packet 4e, ounce 10c, 1-4 pound 20c. pound 50c.

Purple Top Globe.



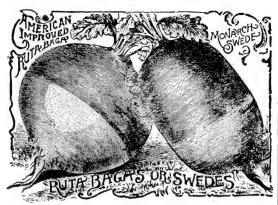
Similar to above, except shape. The largest yielder of any Turnip on the list; desirable far table use or stock. PRICE: Packet 4c. ounce 10c. 1-4 pound 20c, pound 50c; 5 pounds or more, not prepaid, 35c per pound.

White Egg.

A quick growing, egg-shaped, perfectly smooth, pure white variety with small top and leaves. The flesh is very sweet, firm and mild, never having the rank, strong taste of some of the early varieties. PRICE: Packet 4c, ounce 10c, 1-4 pound 20c, pound 70c.

Mixed Turnips.

All the table varieties of Turnips mixed in equal proportions. A desirable mixture for family use. PRICE: Packet 4c, ounce 10c, 1-4 pound 20c, pound 60c.



RUTABAGAS.

Purple Top.

A large early sort of fine quality. Roots globe shaped, skin purplish red above ground and yellow below; flesh yellow, necks small. An excellent variety in every way. PRICE: Packet 4c, ounce 10c, 1-4 pound 20c, pound 50c.

SPECIAL NURSERY CATALOG.

Don't fail to write for our full and complete 32page illustrated catalog, with prices and descriptions of everything in the Nursery line.

We have no agents, thus are enabled to give you the benefit of agents' commissions. It's our only salesmen, but it's a money-saver and tells you all about the best stock grown.

RATEKINS' SEED HCJSE.

TOBACCO.

It is not generally known that Tobacco can be successfully grown in the West. A year's supply of good smoking Tobacco can be easily produced on a small plot of ground. The seed should be sown on a finely prepared seed bed early in the spring, and when about six inches high the young plants set out two feet apart in rows three feet apart and cultivated frequently.

Connecticut Seed Leaf.

Best adapted to the northern and middle States, as it is hardier and matures its crop earlier than other varieties. PRICE: Packet 5c, ounce 25c.

ROOTS.

HORSERADISH.

Fine, large, thick roots may be grown in a single season by pianting the young roots early in the spring in good rich, loose soil. Fresh plantings should be made from year to year as the old roots grow rough and prongs. Small roots by mail, per dozen, 25c, per 100 \$1.00.

RHUBARB.

Culture.

Usually multiplied by division of roots. Plant four feet apart each way, in very rich soil. Can easily be grown from the seed which we herewith offer. Rhubarb is a gross feeder and will make good use of the strongest manure, either fresh or rotted. Pull as long as demand continues, which is usually one to two months. Cultivate well and

top dress liberally twice a year in early spring and at the end of pulling season. Plants are easily grown from seed and used for forcing during winter.

Victoria.

A good market sort. Stalks red. This is sometimes called "wine plant" and is very much superior to the common kinds of pie plant. PRICE: Postpaid, packet 5c, onnee 15c, 1-4 pound 50c.

HERBS.

ANISE.

Used for garnishing and flavoring; the seeds have an agreeable aromatic taste. PRICE: Packet 5c, ounce 10c.

DILL.

Stems and seeds are used for flavoring and pickling with cucumbers. PRICE: Packet 5c, ounce 10c.

SAGE.

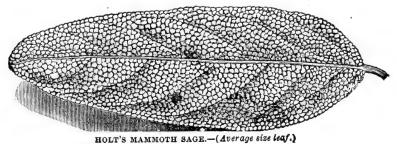
Much used for flavoring and dressing. PRICE: Packet 5c, ounce 10c.

SUMMER SAVORY.

For flavoring soups, etc. PRICE: Packet 5c, ounce 10c.

THYME.

Used for seasoning soups, sausages, etc. PRICE: Packet 5c, ounce 20c.





Very Selected List of Flower Seeds.

We are pleased to offer a very choice list of the most popular and easily grown flower seeds. They are all strictly They are all strictly able. We know you fresh and first-class and the best obtainable. rresn and nrst-cuass and the best obtainable. We know you will be pleased with them as they will undoubtedly prove a thing of joy and beauty. We urge every farmer (under the supervision and efficient assistance of the good wives) to plant and adorn the home with flowers; it will pay in more ways than one.

Our packets are not of the "two for a nickle" put up by many seed houses but well filled packets of the highest priced finest seeds.

We regret that we cannot illustrate every one of the varieties we list, but space forbids. Many varieties that are usually listed separately, we have included in a single package under the name of mixed varieties.

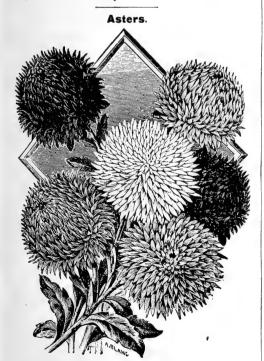
The pleasure resulting from a large and varied collection

of flowers will amply repay for the time and labor used.
We have only sold flower seeds two years but are highly

gratified at the results and the universal satisfaction that was given to our customers. We have added to our list and now have the cream of varieties and the choicest flowers.

The grade and varieties we handle are of the best so we cannot make any great cut on prices filling the packages as we do. We can guarantee you great value for the money, and know you will be fully satisfied if you pass us your order.

Our list contains the Up-To-Date varieties.



It is unnecessary to dwell on the great beauty of these popular favorites, as they are appreciated by every one.
Our seed is the finest that France and Germany produce.
We recommend our friends to plant a number of varieties, as no other annuals afford so magnificent a display during the summer and fall. Hardy annual.

This beautiful flower is being constantly improved, and is now one of the most desirable and effective of our garden beauties. As a bedder it is beyond description, as large beds of these lovely flowers greet you everywhere. Indispensable for cut flowers, fine as pot plants, and great to show at fairs and exhibitions.

DWARF CHRYSANTHEMUM — FLOWERED. — Very desirable on account of its large and perfect flowers, great beauty and late blooming; mixed, 10-inch. PRICE, 5c.

QUEEN OF THE MARKET .- Of graceful, spreading habit; its great merit is its early flowering character being in full bloom fully two weeks before any other Aster begins to blossom; mixed colors, 12-inch. PRICE, 5c.

FINE MIXED .- Embracing a great many varieties and colors. PRICE, 5c.

Ageratum.

AGERATUM .- Valuable plants for large beds or borders, and very useful where cut flowers are in demand; in bloom the whole summer; also good for winter blooming in pots, succeeding in any soil. Indispensable for bouquets. Hardy annuals.

FINE MIXED .- 13-inch. PRICE, 5c.

Balsams.

LADY'S SLIPPERS, OR TOUCH-ME-NOT .- These are old favorites with every one, owing to their handsome double flowers, brilliant colors and stately growth. To produce very double flowers, they must be transplanted into rich soil, fifteen inches apart, in a sunny position, and frequently watered. Cutting out some of the side branches is also advisable, especially with the strong and bushy growing varieties. Half-hardy annuals.

CAMELIA—FLOWERED.—Double, very choice; spotted and variegated with white, mixed. PRICE, 5c.
FINE MIXED.—Finest varieties and colors, mixed.

PRICE, 5c.

DOUBLE CAMELIA—FLOWERED.—These are (like Asters, Pansies, Pholx and Peas) one of our specialties, which we sell to the best trade all over the country, and we know that our seed will produce fine, large, double flowers in great abundance.

Bachelor's Buttons.

It is a beauty, the national flower of Germany, and a great favorite in all parts of the old country. A unique little plant, forming a dense mass of foliage, over which are borne hundreds of lovely blue blossoms beautifully fringed and serrated. Hardy annuals; two to three feet high. PRICE, Packet, 5c.

Carnation - Marguerite.

This new class of Marguerite Carnations will bloom about four months after sowing the seed. The flowers are of brilliant colors, of red, pink, white, variegated, etc., exquisitely sweet, and fully 80 per cent perfectly double. Succeed in open graphs or in the colors of the colors and the colors are seed in open graphs or in the colors. edulinity sweet, and rainy so per cent perfectly double. Succeed in open gardens or in pots. Sown in the autumn the flowers will be in full bloom early in the spring. Flowers can be hand all the year round. PRICE, Packet, 5c.

For \$1.00 you may select Seeds in Packets amounting to \$1.25.

For \$2.00 you may select Seeds in Packets amounting to \$2.50.

For \$3.00 you may select Seeds in Packets amounting to \$3.75.

For \$4.00 you may select Seeds in Packets amounting to \$5.00.

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Calliopsis, or Coreopsis.

One of the most showy, free-flowering of hardy annuals; its graceful and showy flowers, embracing nearly every shade of yellow, orange and rich brown, verging to crimson, and borne on slender stems, are particularly adapted for bounders.

FINE MIXED.—All colors; one to two feet. PRICE, 5c.

Canna.

Unquestionably one of the finest of bedding plants for the American climate. Their handsome leaves combined with their varied and richly colored flowers have an extremely fine effect. They are easily raised from seeds which should be soaked in hot water for several hours.

CANNA.—Stately and highly ornamental foliage plants, growing from five to ten feet high, and forming a most beautiful object for the lawn or for large circular beds. Mixed, all colors. PRICE, Packet, 5c.

FANCY LARGE FLOWERED.—This is a very large-

FANCY LARGE FLOWERED.—This is a very large-flowering strain of dwarf, compact growth, averaging three and a half teet in height. They flower freely and the first year from seed.

The florets are large with broad, brilliantly colored netals. Our seed is a mixture of the finest large flowering sorts.

PRICE, packet, 5c; ounce, 25c.

Chrysanthemum.

A handsome plant, with striking and brilliant flowers blooming till late in autumn, when it is in full glory; producing double and single flowers of various shades; very attractive for bouquets and vases. Sometimes called "Painted Daisies." Hardy annuals.

FINEST MIXED .- Many colors; 18-inch. PRICE, 5c.

Candytuft (Iberis).

Among the most useful of perfectly hardy annuals. Will grow in any soil, require no care, and produce neat clusters of flowers very freely.

EMPRESS.—A beautiful, pure white variety of branching habit, producing trusses of flowers. We can recommend this for a fine bed of early white flowers. PRICE, 5c

FINE MIXED.—Including many colors. PRICE, 5c.

Cockscomb.

A class of very magnificent, attractive and showy annuals, producing massive heads, of rich shades and colors of great effect in the garden or in pots. Well adapted to our climate, as they will stand drouth well. Half-hardy annuals.

FINEST MIXED.—All colors; two feet. PRICE, 5c.

Coleus.

Highly ornamental plants in endless variety of colors and shadings, indispensable for ribbon and carpet bedding, or as single specimens for pots and vases. Half-hardy annuals,

FINEST HYBRIDS MIXED.—One to two feet. PRICE.

Cosmos.

This is a rapid growing autumn flowering plant, producing large bushes seven feet high. They begin to bloom in August and from that time until November each plant is covered with a mass of bloom. The flowers are two inches in diameter and resemble single Dahlias. The colors are pure white, bright pink, flesh color and deep rose, each having a brighter yellow center. Germinates in from three to five days. Mammoth perfection mixed. PRICE, Packet 4c.

Dahlia.

Every one knows and admires the Double Dahlia, but few are aware that it can be grown so easily from the seed and flowers the first season. Take up the roots as soon as frost occurs in the fall, and preserve in a warm dry cellar. Half-hardy bulbs.

DOUBLE MIXED.—Finest varieties, two to four feet. PRICE, 5c.

Dianthus (Pink).

The China and Japan Pinks are deservedly very popular, as few flowers can equal them in beauty and profusion of bloom. They bloom continually all summer and fall, until overtaken by severe frost; they live over winter and bloom finally again the second season. So satisfactory a class of

flowers should be grown in large variety in every garden. Hardy biennial.

CHINESIS.—(Double Chinese Pink.) A splendid mixture, one of the finest varieties; one foot. PRICE, 5c.

FANCY MIXED .- PRICE Packet, 5c.

Eschscholtzia (California Poppy).

Very attractive plants for beds, edging or masses, profuse flowering and fine cut foliage; in bloom from June until frost. One foot. Hardy annuals.

FINE MIXED.—Flowers yellow and white; blossoms two inches in diameter. PRICE, 5c.

GOLDEN WEST.—The flowers of this new giant variety have large, overlapping petals, often delicately waved at the edges. Their intense and shining color, immense size and lovely forms, call forth the admiration of all. PRICE, 5c.

Daisy (Bellis Perennis).

Will make young strong plants to carry over winter with protection, and blooms very early in the spring. Although saved only from fine double flowers, the seed produces a few singles and semi-doubles. Half-hardy peren-

FINE DOUBLE MIXED.—Six inch. PRICE. 5c.

NEW GIANT SNOWBALL.—A most charming variety of this handsome little flower. It has unusually large, double flowers on very long stems, making it very valuable for cutting. Color, a pure snow white. Don't fail to give this little beauty a fair trial, and it will be sure to please you. PRICE, Per packet, 10c.

Geranium.

Started early, this favorite flower can be produced from the seed, and will flower the first season. Finest mixed. PRICE. Packet, 5c. _____

Gourds.

(Climbing.) These curious and interesting plants should be more largely grown. All varieties mixed. PRICE, 5c.

Heliotrope.



Heliotrope.

A well-known profuse flowering and deliciously fragrant plant that everyone loves. Splendid for bedding or pot culture. Can be easily raised from seed, but should be started early in the house. Half-hardy perennial.

FINE MIXED.—Choicest varieties mixed, 18-inch, PRICE, 5c.

Hibiscus.

This elegant plant is perfectly hardy in any place and is one of the most beautiful hardy flowering plants we have. The colors range from pure white to blush and deep pink. This is one of the most beautiful and showy lawn plants of recent introduction.

NEW HYBRIDS.—Best mixed, including seed of the New Crimson Eye. PRICE 5c.

Hollyhocks.

All our seeds of this beautiful plant have been saved from the finest and largest double flowers only and will produce flowers extremely double and in the best, brightest and most charming colors. Sow early. PRICE, Packet, 5c. most charming colors.

Ice Plant.

A handsome and curious plant for hanging baskets, rock work and vases. The leaves and stems appear as though covered with ice crystals. The whole plant is peculiarly brilliant in the sunshine, thriving best in a dry, loany, or sandy soil, requiring a warm, sunny situation. hardy annuals.

CRYSTALLINUM .- Flowers white. PRICE, Packet, 5c.

Larkspur (Delphinium).

Plants of great beauty, richness and endless variety of Plants of great deauty, richness and endless variety of colors, with great duration and profusion of bloom. Few plants are so useful for their decorative qualities, either in the garden or when cut for bouquets, etc. Hardy annuals.

DOUBLE FINE MIXED .- Many varieties and colors. PRICE, 5c.

Mignonette (Reseda Odorato).

This fragrant little plant is probably the most popular annual grown. If the plants are thinned out they will grow stronger and produce larger spikes of flowers; and can be had during the whole year by sowing at intervals. annuals

SWET SCENTED.—(Odorato.)—The old variety, very fragrant, onefoot. PRICE Per ounce, 15c; packet, 5c.
MIGNONETTE MIXED. — Many varieties. PRICE, packet, 5c.

Marigold (Tagetes).

A free-flowering plant of easy culture, with double flowers of rich and beautiful colors, producing a splendid effect, whether planted in beds or borders; and continuing in beauty until destroyed by frost. Half-hardy annuals.

AFRICAN MIXED.—Best double colors, two feet. PRICE. 5c.

LEGION OF HONOR .- Dwarf, compact, with LLUION OF HUNOK.—Dwart, compact, with dark green, fern-like leaves; rich golden-yellow marked with velvety brown. Blooms abundantly from July until cut down by frost, fifteen inch. PRICE, 5c.

Nasturtium - Dwarf.

one of our showiest and most popular annuals, forming compact plants, making gorgeous masses of rich colored and brilliant flowers, bloowing in succession all through the season; they should be grown in rather poor soil.

KING OF TOM THUMBS.—Intense s with rich dark foliage. PRICE, Packet, 5c. scarlet flowers,

CLOTH OF GOLD.—In striking contrast to the above, the foliage is a clear bright yellow, while the deep scarlet flowers add much to its beauty. PRICE, 5c.

FINEST MIXED.-Many varieties and colors. PRICE, Per ounce, 15c; packet, 5c.

Nasturtium - Tall.

The Tropaeolum Majus, or Tall Nasturtium, are among the easiest grown and prettiest of climbers. They bear hot, dry weather very well, and thrive on poor soil. Very free bloomers and the green seed pods make excellent pickles; ten feet. Hardy annuals.

FINEST MIXED TALL NASTURTIUM.—Many bright colors. PRICE, Per ounce, 10c; packet, 5c.

Pansy (Heartease).

The pansy is the most popular of all flowers grown from

It is everywhere popular, both for the brilliant beauty seed. It is everywhere popular, both for the brilliant beauty of its flowers and the long continuation of bloom. Pansies delight in a cool, moist situation, partially protected from the hot noon-day sun; in exposed positions in the hot summer weather the flowers will be smaller. Seed sown the latter part of August or fore part of September will make strong young plants for early spring blooming. Protect in winter with leaves or evergreen branches. Hardy perennials ennials.

WHITE OR SNOW QUEEN.—Flowers of a delicate, pure satiny white. PRICE, 5c.

FAUST OR KING OF THE BLACK.—Deep cool black, coming constant from seed; a group of this variety presents a fine appearance. PRICE, 5c.

FINE MIXED.—Fine varieties and colors mixed.

PRICE, 5c.

Double and Single Petunia.



Double and Single Petunia

No class of flowers better repay the care required than the Petunias; easily raised from the seed; the richness of color and abundance of rich flowers make them indispensable for bedding plants. Every garden should have a bed of these magnificent flowers, a gay mass of bloom from June to hard frost. Hardy annual.

FINE MIXED .- Best of the older sorts. PRICE, Packet, 5c.

Phiox Drummondii.

Superb plants, prized for the profusion of their richly colored flowers of many hues, their long duration in bloom, and the grand effect they produce in clumps or masses. We invite particular attention to the large flowering as especially fine. Easy of culture, eighteen inch. Hardy annual.

ALBA.-Pure white. PRICE, 5c.

FINE MIXED .- All varieties and colors. PRICE, 5c.

DOUBLE MIXED.—This variety is a profuse bloomer, and of great value for bouquets. They are of recent introduction and are specially desirable for cut flowers, lasting much better than the single sorts. To produce the best results they should be grown in a light soil. About eighty per cent of the seed sown will be double. PRICE, packet, 8c,

Portulaca.



Double Portulaca.

In brilliancy and beauty of colors Portulacas are unrivaled. They delight in sunny situations and light soils, where they rapidly carpet the ground, each plant covering a space of about fifteen inches in diameter; six inch. Halfrivaled. hardy annuals.

FINEST SINGLE MIXED.—A great variety of colors. CE, 5c. PRICE.

DOUBLE ROSE-FLOWERED MIXED.-Unsurpassed for brilliancy of color and great beauty. PRICE, Packet, 5c.

Primula (Chinese Primrose).

A charming and most profuse flowering plant, and one of the most desirable of house blooming plants, and will richly compensate for the little care they require. They are in almost constant bloom all winter, and if the plants are transferred to a shady border they will bloom nearly all summer. Care should be taken in watering that no water fall on the buds as it causes them to rot. Greenhouse perennial.

CHINESE PRIMROSE.—Choice fringed varieties mixed: the seed we offer is saved from one of the finest collections, six inch. PRICE, 10c.

Ricinus (Castor Oil Bean).

Ornamental plant of stately growth and picturesque foliage, with brilliant colored fruit, producing a sub-tropical effect; fine for lawns, massing, or center plants for ribbon beds. Half-hardy annuals.

ZANZIBARIENSIS .- The largest castor bean in culti-An enirely new class from Africa, with leaves often measuring two feet across, some being light green, others bronze brown. For large foliage beds we know of nothing more striking and effective and are objects of beauty all summer and fall. PRICE, 5c.

FINE MIXED.—The best and choicest varieties mixed. PRICE, Packet, 5c.

Salvia (Flowering Sage).

The Salvia is one of the most beautiful of all flowers: the brilliant spikes of the searlet flowers produce for months a dazzling effect. Of easy culture and fine for massing and bouquets. Half-hardy annual.

NEW DWARF, OR BONFIRE.—(Large Flowering Scarlet Sage.) A splendid new sort blooming much earlier than old variety. The plants are dwarfer and more compact in habit, while the flowers are larger and more numerous than are of the brightest scarlet imaginable lasting until late in the fall, two feet. PRICE, 10c.

Stock (Ten Weeks).

The Ten Week Stock is one of the most popular, beautiful and important of our garden favorites; whether for bedding, massing or pot culture, it is unsurpassed, either for ding, massing or pot cutture. Its unsurpassed, either for brilliancy or color, exquisite fragrance, or profusion and dura-tion of bloom. For winter blooming in the house sow seed in June. The seed we offer is from a celebrated German stock grower, from selected pot plants, and will produce more than three-fourths fine double flowers. Hardy annual.

NEW LARGE FLOWERING habit dwarf, with magnificent spikes of very large double flowers of all colors; mixed, eighteen inches. PRICE, 8c.

Sweet Peas.

There is no annual grown that is more popular, or that is more admired by all than the Sweet Pea, with its dainty colors and delicate perfume. For cutting, for bouquets vases, corsage and buttonhole wear, no flower except the rose can compare with them.

To succeed best they should be sown as soon as the ground can be worked in the spring, and when well us given bush or strings to support the and when well up given bush or strings to support them. They commence to bloom early, and if the flowers are picked as soon as they fade, will continue to bloom all summer. If allowed to form seed they will soon stop flowering and die down.

BLANCHE FERRY.—Popular pink and white. PRICE, Packet 4c, 1-2 pound 15c, pound 50c.

BLANCHE BURPEE.—A new, large white; one of the finest yet produced. PRICE, Packet 4c, 1-2 pound 15c, pound 50c,

ECKFORD MIXTURE.—This mixture contains over forty varieties, including the novelties of 1900 and other choic evarieties. PRICE, By mail, postpaid, per pound 55c, 1-2 pound 30c, 1-4 pound 15c, ounce 10c, packet, large size, 4c.

ALL COLORS MIXED.—This is also a very good mixture; contains over twenty varieties and will furnish fine flowers all through the season. PRICE, By mail, per pound 40c, 1-2 pound 15c, ounce 5c, qacket 3c.

BARGAIN MIXTURE OF SWEET PEAS.—We find ourselves with large stocks of some of the best named kinds and we have taken a few hundred pounds and mixed them. PRICE, Bargain Mixture Sweet Peas, prepaid, pound 30c, 1-4 pound 12c, packet 4c.

COUNTESS OF RADNOR.—One of the handsomes Standard rich lavender mauve, wings lighter. PRICE Packet 5c, ounce 10c, 1-4 pound 25c. PRICE,

CUPID.—An unique novelty, of dwarf, shrubby growth, therefore desirable for bedding. Flowers pretty and freely produced. Mixed colors. PRICE, Packet 5c, ounce 10c, 1-4 pound 25c.

EMILY HENDERSON.—Earliest blooming standard pure white variety. It bigins to flower nearly as soon a the Extra Early Blanche Ferry. Flowers of snowy whiteness, with reflexed standard. PRICE, Packet 5c, ounce 10c, 1-4 pound 20c.

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EX. EARLY BLANCHE FERRY.—Earliest of all. An improvement on Painted Lady. Delicately handsome and a profuse bloomer. PRICE, Packet 5c, ounce 10c, 1-4 pound 20c.
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Flowers daintily shaded light blue on a white ground, and boldly edged with a narrow border of deep violet. PRICE, Packet 4c, ounce 6c, 2 ounces 10c, 1-4 pound 15c, pound 45c.

WILHELMINA.—Very large and perfect shaped flower; white, striped with bright rose carmine. PRICE Packet 4c, ounce 6c, 2 ounces 10c, 1-4 pound 15c, pound 45c.

LADY PENZANCE.—Orange-pink, wings pure white.
PRICE, Packet 5c. ounce 10c, 1-4 pound 20c, pound 50c.
MARS.—Crimson scarlet. PRICE, Packet 4c, ounce

MARS.—Crimson scarlet. PRICE, Facket 4C, ounce 8c, 1-4 pound 15c, pound 45c.

FANCY MIXED.—A very choice collection of the newest and best large flowering Sweet Peas. Parties who want everything good and want to grow them with the least amount of care should grow our mixed seed. A better mixture can not be bought anywhere at any price. PRICE, Packet 5c, ounce 8c, 1-4 pound 15c, pound 50c, postpaid.

Verbena.

A well-known favorite, and is valuable for bedding on account of their low trailing habit; blooms freely from seed, and are more healthy and make larger and hardier plants than if grown from cuttings; requires a very rich, mellow soil. The seeds sprout very unevenly, and some will not be started at the time others must be removed, hence the soil must be disturbed as little as possible. Half-hardy perennials.

ALBA.—Pure white, a desirable variety for florists or for the cemetery. PRICE, 6c.

EXTRA CHOICE MIXED. -Seed saved from the finest collection of named sorts. PRICE, 7c.

Zinnia (Youth and Old Age).



Plants of great beauty, of bran-ching habit, and ching habit, and splendid brilliant colored double flowers, rivaling in beauty and form Double Dahlias. Bloom in great profu-sion and with increased splendor from June until cut off by frost; begins to when bloom quite small. Easy of culture; thrives in any good soil. Halfhardy annuals.

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Finest large flowering varie-ties, three feet. PRICE, 5c.

TOM THUMB.—These Dwarf Double Zinnias produce IOM IHUMB.—These Dwarf Double Zinnias produce compact dwarf bushes, varying six to twelve inches in height and from six to fourteen inches in diameter, coming mostly true from seed. The little plants are covered with handsome double flowers of many bright and rich colors. Plants are very free flowering, and continue in bloom unti destroyed by frost. PRICE, 5c.



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All heavy seed is sent by freight and to give an idea as to the rate our customers have to pay, we have secured the freight rates given below. No shipment is made for less than 25 cents for each road shipped over. Corn, oats, wheat, barley, rye, buckwheat, potatoes, artichokes, etc., take fourth-class rate, while seed, millet, cane seed, and smaller seed take third-class, which is a little higher than fourth-class. The following is the rate on 100 pounds, fourth-class, from Shenandoah, Iowa:

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